IN THE PORTALS OF INDIAN UNIVERSITIES

Convocation and other addresses

BY

C D DESHMUKH

UNIVERSITY GRANTS COMMISSION

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FOREWORD

This is a collection of a few of the addresses delivered by Shri C.D Deshmukh during 1956-58 after he became Chairman of the University Grants Commission These addresses contain some of the thoughts of Shri Deshmukh on various aspects of education in India. The University Grants Commission is charged with the responsibility of co-ordinating and maintain ing standards of teaching and examination in the universities, and Shri Deshmukh on becoming Chairman of the Commission had to turn his mind to the field of higher education as his new interest and concern These addresses reflect his own thinking and the trends of opinion and discussion in the Commission and in the university world as a whole on matters of importance at the present time

While the thoughts and views contained in these addresses are personal to Shri Deshmukh and do not necessarily express any official views of the Commission the University Grants Commission is glad to have this opportunity of presenting them to the world in the hope that a wider audience than those that listened to Shri Deshmukh will be able to ponder over what he has to say

SAMUEL MATHAI
Secretary
University Grants Commission

New Delhi

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JADAVPUR UNIVERSITY*

I am happy to be in the midst of fresh graduates of Jadavpur University on the occasion of this Convocation, which marks a landmark in the history of the germinal institution the Bengal College of Engineering and Technology I recall to my mind the noble origin of this institution and feel proud and privileged that I should have been given the opportunity of participating in this function. There was a fine efflorescence of virile nationalism in our country 50 years ago and nowhere was it more resplendent than in Bengal. The Bengal College of Engineering and Technology was a symbol of this spirit together with some financial institutions and industrial concerns

During these 50 years the engineer has, one may justly say come into his own. The administrator and the politician have to rely more and more heavily on the engineer and the technologist for both formulation of plans and their implementation.

The acquisition of a degree is an achievement worth felicitations, and I congratulate the young men and women who have received their degrees today At the same time let me remind them that the acquisition of a degree or a skill is not a good thing in itself. All skills are good or bad according to the use they are put to. Technological skills can be used without a due sense of social responsibility and even exploited for manufacturing the means of mass destruction, or they can be harnessed for socially productive purposes and thus subserving the happiness of man. I am confident that the energies of Indian engineers will always be directed into constructive and socially meaningful channels.

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*Delivered at the Second Annual Convocation, on 23rd Dec 1956.

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It is naturally expected that the engineers and technologists of tomorrow have a good acquaintance with India's Five Year Plans Even a casual perusal of the Second Plan will convince them that they need not have any worry regarding gainful employment. I should like to go into some detail in regard to the problem of the demand and supply of engineering and technical personnel in India before referring to other matters of interest to engineers

Expenditure by the Central and State Governments on activities which demand engineering personnel has grown from Rs 32.24 crores in 1938-39 to Rs 518 29 crores in 1955-56. Even after making adjustments for the rise in price level as indicated by the Index Number of wholesale prices, the expenditure in 195--56 would still remain as high as Rs. 137.84 crores as compared to Rs 32 24 crores in 1938-39 The d mand in the public sector has thus grown four times during the last fifteen years. In the private sector also a study of the growth in the total paid up capital of relevant Industries would indicate a three fold increase in the demand for engineering personnel during the last fifteen years. Experiments have already been initiated in India on the peaceful uses of nuclear energy If these experiments make rapid progress, then there is no knowing as to how many highly qualified engineers will be in demand for installing and looking after atomic reactors

The shortages of engineering personnel at the end of the First Five Year Plan had been calculated as some 1,200 graduates and 3,300 diploma-holders in the Civil branch in addition to some 950 graduates and diploma holders, in Mechanical branch on the Electrical side, in Tele-Communication and in other branches. It has been calculated that during the Second Five Year Plan period India will require a little over 11,000 graduates and about 26 000 diploma holders in Civil Engineering 5 000 graduates and 12 000 diploma holders in Mechanical Engineering, 5,500 graduates and 10 500 diploma holders in Electrical Engineering and some 6,-00 graduates and diploma-holders in Tele Communication Mining Metallurgy and Chemical Engineering.

During the First Five Year Plan, facilities for the training of personnel required in engineering occupations were systematically expanded by the Government. The Institute of Technology at Kharagpur as well as four new engineering colleges and 19 polytechnics were established during the period. In addition the Indian Institute of Bangalore as well as 20 existing engineering colleges and 30 existing engineering schools were further developed during the period. All these measures resulted in doubling the output of degree holders and increasing the output of diploma holders from 1850 to 4900 during the period of the First Plan. During the Second Plan it is proposed that a sum of Rs 50 crores should be devoted to the expansion of facilities for technical education for producing engineers supervisors overseers and other categories of personnel. Among the programmes included are development of various technical courses relating to printing technology town and regional planning, architecture, strengthening of existing technical institutions, establishment of higher technical institutions, expansion of Indian School of Mines and Applied Geology organisation of refresher courses for serving engineers and so on. The result will be that institutions imparting training to engineering personnel both for degree and diploma courses will increase from 128 in 19.5 to 155 in 1960 Targets for increasing the outturn of engineering personnel have been fixed in the Second Five Year Plan. It has been planned that in the year 1960 India should have out 1,900 graduates and 3,500 diploma-holders on the Civil side 1,000 graduates and more than 1 000 diploma holders on the Mechanical side as well as on the Electrical side In addition to some 1 400 graduates and diploma holders in Tele Communication, Electronics, Mining Metallurgy Chemical Engineering Aeronautical Engineering Architecture and Automobile Engineering.

Some Indian students get their engineering training abroad and return to India after acquiring the know-how Foreign experts who are sent out to India under various aid programmes and the consultants and technicians who come to India to erect plant and machinery purchased by India, constitute

another source of supply for India's requirements of engineering personnel.

In spite of the best efforts of the Government and universities to accelerate the outturn of engineering personnel it is anticipated that in 1960-61 there will be a deficit of about 900 graduates and 5 000 diploma holders in Civil Engineering and of 6 500 graduates and diploma-holders in the other branches mentioned just now The Engineering Personnel Committee set up by the Planning Commission submitted its report on May 16 1956 and recommended that steps should be taken to increase the capacity of existing institutions and to establish 18 more engineering colleges and 62 more engineering schools in different parts of the country These suggestions which will involve a total outlay of about Rs. 10 crores, are under consideration by the Government.

The Central Government has been aiming at co-ordinating the research carried on in India's 33 universities, 14 national laboratories, 88 research institutes and 54 associations in the field of technology with important problems in different fields of national development. Over 500 research scholarships of Rs. 200 per mensem have been instituted for students who wish to undertake research in science, engineering and technology A scheme for research fellowships for encouraging advanced scientific research has also been introduced.

The purpose behind this profuse quotation of facts and figures before this gathering of fresh degree-holders is to inspire in them a sense of hopeful expectancy accompanied by a sense of grave responsibility While addressing graduates in theoretical sciences or humanities one has to caution them against false hopes or expectations The spectre of unemployment is always haunting their mental horizons That phantom does not face fresh graduates in engineering and technology They are in great demand for the development and industrialisation of the country But a sense of responsibility is also essential in view of the huge investments which the State is making in providing training facilities for engineering personnel. The engineering student must never forget that these huge funds

have come largely from the tattered pockets of the Indian peasant who has to be repaid by making the most of these training opportunities

The Engineering Personnel Committee have noticed some falling off in the standards and deterioration of quality of new *recruits to the engineering profession They have traced the* causes and recommended field experience in industrial enter prises and engineering projects for teachers as well as students as one of the remedies against the deterioration They also hold that the methods of examination are ineffective and have recommended that more attention needs to be given to professional attainments than to bookish memorisation. This is a field in which industrial houses can come forward to serve the needs of the nation by accepting apprentices for training in their establishments. This will also give some opportunity to the students to earn while learning

If the falling of standards is a fact, the would-be engineer has to be alerted about the consequent risk. The engineer is as it were the foundation of the edifice of India s prosperity If the foundation is defective, the whole super structure becomes weak. It is no use putting the whole blame on external factors Only a bad workman quarrels with his tools. The materials available in India offer enough scope to a competent engineer to *exercise his creative genius. An engineer who has imbibed the* spirit of the dignity of labour and who looks upon his employ ment as work and not merely as JOB would enjoy the co-opera tion of his work mates. And if his work mates are prone to shirk their responsibilities, he should learn to command their co-operation But unless the civil engineer can give practical guidance to masons brick layers, plumbers or carpenters unless the mechanical engineer can show a better way to lathe operators, moulders, turners, furnacemen or boiler-attendants unless the electrical engineer can help wiremen, fitters or linesmen unless the agricultural engineer can operate farm machinery and the mining engineer can do some drilling, he will neither enjoy nor command co-operation.

With the advent of independence in India, the days of high-brow bureaucracy are over It is no more possible to

drive the people any more than it is possible to ignore them. If the people are to be inspired into making the necessary gigantic efforts of construction they will have to be led and not driven by engineers who know their jobs and who are willing to put their shoulders to the wheel. The engineer should look upon himself as the captain of a team and not as the driver of an unwilling herd. Then alone will he be able to make those he leads play the game This game has to be played fairly All malpractices and corruption prevalent in the works of development and construction have to be eradicated Only a conscientious captain of a vigilant team can eradicate this evil from the soil of India. If this evil is not eradicated all schemes of economic progress will be seriously retarded It is a patriotic task which only an engineer and not the administrator or the politician can fulfil. An engineer is only he who can construct a bridge for say ten lakhs which any fool or knave can construct for one crore of rupees.

Before dwelling further on the pitfalls of the engineering profession, I should like to refer to the noble tradition to which the graduates of the Jadavpur University are heirs. That conference of leading citizens of Bengal held in Calcutta on November 16 1905 which appointed a Committee to take immediate steps to establish a National Council of Education and to organise a system of literary, scientific and technical education on national lines and under national control showed rare courage and vision in an age the horizon of which was darkened by imperial bureaucracy at the height of its arrogant power This Committee included men like Dr Rash Behari Ghose Sriyuts Surendra Nath Banerjee Gooroodas Banerjee Rabindra nath Tagore Aurobindo Ghose, C. R Das and Bepin Chandra Pal The National Council of Education had only an endowment fund of Rs 8 5 lakhs when it launched on the ambitious venture of establishing a national university for imparting a more comprehensive system of education. The Bengal Technical Institute was amalgamated with the National Council of Education and the devoted batch of workers passed through many vicissitudes.

Again with singular clear sightedness, the Reconstruction

Committee appointed by the National Education Committee in 1918 anticipated many of the problems of Independent India and recommended that the Bengal Technical Institute be developed with a view to enabling young men to organise simple home industries on national lines and with improved technique The Committee desired that the Institute should serve the cause of the industrial revolution of the country not merely by turning out hands but also by producing men who could organise and conduct simple industries with a small capital and thereby maintain the *independence and dignity of labour* The Committee was also aware of the harmful potentialities of excessive specialisation, which the modern educationists are seeking to mitigate through general education. On this issue the Committee observed that technical education, removed from humanising and liberalising influences was sure to degenerate into a mainly bread and butter question and it should, therefore be supplemented by lectures on subjects of general, humane and enduring interest. The Committee had also thought of the problem of the medium of instruction and recommended that as far as practicable, instructions should be given in Bengali.

The recommendations of this Committee were accepted and given effect to The National Council of Education devoted almost the whole of its resources to technical education through the Bengal Technical Institute which came to be renamed the College of Engineering and Technology Bengal from the year 1928 National independence brought State help as well as recognition of degrees by Public Service Commission and certain other authorities. For a long time the College had been virtually functioning like a university The crowning success of this chequered endeavour came when the Government of Bengal gave statutory recognition to the historical individuality of this institution by the Jadavpur University Act 1955 enabling them to provide for the teaching of and for training and *instruction in all branches of engineering, technology humanities and sciences.*

With the creation of the Jadavpur University the University Grants Commission of which I happen to be the Chairman, has not lagged behind in extending all possible co-opera

tion for its healthy growth The Commission has agreed to a ceiling recurring grant of Rs. 5,98,000/ to the University In addition to this the Commission has agreed to share the burden to the extent of Rs. 3 47 730/ for providing additional accommodation and Rs. 9 68,532/- for the starting of Civil Engineering degree courses. Proposals in respect of the College of Arts, hostel buildings, buildings and books for library and wiping out of old debts have been put forward to the Commission on behalf of the Jadavpur University These proposals involve an amount of more than Rs. 17 lakhs and all I can say today is that the proposals are undergoing a sympathetic and careful scrutiny at the hands of the Commission.

With this brief retrospect of the past tradition and achievements of the Jadavpur University, let us again turn to the general problems facing its alumni. Since the College of Engineering and Technology is the reservoir of inspiration to the Jadavpur University it is natural to expect that the objective or the engineering outlook will orientate the attitude of its graduates. The engineer it is often said but seldom proved, suffers from a paralysis of personality on account of the extreme specialisation of his subject. It is true that there is a good deal of specialisation in the engineering line We have specialists in buildings, town planning, highways irrigation and hydraulics There are specialists in mechanics and electricity Sanitation and public health constitute a special branch of learning. Soil and water conservation as well as farm machinery constitute the branch of Agricultural Engineering. Sound, Tele-Communication and Combustion are subjects of specialised study Mining of coal, metal and petroleum calls for the concentrated attention of a specialist. Textiles, sugar cement, iron and steel may demand the services of specialised experts in India. Aeronautical, marine locomotive and automobile engineering have branched off into separate trainings. The need to reduce frictions between the various parts of complicated mechanisms has given birth to a set of specialists known as lubrication engineers. Lastly on the threshold of this age of atomic energy and nuclear power, India will be needing the nuclear engineer for her reactors.

The tree of knowledge naturally branches off as it grows The sciences get more and more specialised. This specialisation is a boon in so far as it leads to greater skill but when it results in narrowing the vision of the specialist, its harmful aspect is termed as compartmentalisation. Specialisation is unavoidable in the development of sciences and the only remedy to guard against narrow compartmentalisation of human personality is to supplement the training of the student with a liberal dose of general education whereby he will know something of everything while knowing everything of something.

It is also usual to make a distinction between intellectual sciences and manual arts Systematic knowledge is regarded to be the function of sciences and skilful action is regarded to be the function of manual arts. There used to be a great gulf between intellectual sciences and manual arts in India. All learning, which consisted of grammar logic, metaphysics and similar other genteel disciplines, was the monopoly of a handful of Brahmins. And the large number of artisans and craftsmen developed their manual arts empirically without any attempt at systematising, analysing and generalising their experience. These manual arts were perpetuated from generation to generation by word of mouth and therefore were confined to particular castes.

With the arrival of engines, ships and machines in India as a corollary to the advent of Industrial Revolution in Europe the social stratification in India began to lose its rigidity The old learning was insufficient to cope with new problems and the inherited skills and arts were unable to provide bread in an industrialised world The caste system is breaking up fast because the choice of profession is no more determined by birth It is not uncommon to find a Brahmin boy chiselling a piece of leather and a so-called Harijan young man delivering a lecture on philosophy The old polarisation is vanishing and intellectual sciences and manual arts are getting mixed up In this emergence of the synthesis of intellectual sciences and manual arts the engineer and the technician have to play a very responsible role. To use the analogy of a logical syllogism, the engineer is the middle term between intellectual sciences and

manual arts. He has to establish a liaison between the two by making theoretical sciences more useful and the manual arts more enlightened. He has to induce the theoretical interpreter of natural phenomena to think of practical utility and he has to help the artisan and the craftsman in doing the practical work of the community more intelligently

The engineer in this new era of a welfare State, need not look upon himself as merely a skilled agent of an amateur master In this age of collective nation-building the engineer is in a better position to advise and guide the enterprise of national reconstruction. He need not feel himself inferior to the political or administrative officers who usually have the authority to take final decisions on matters they are not technically competent to deal with Indeed some engineers may happen to have a talent for administration. That must have been the reason which prompted the Engineering Personnel Committee to recommend that technical and scientific personnel should be introduced at suitable levels in the general administrative machinery especially to hold posts where their experience would be of value If the engineer has to play a leading role in the building of a welfare State, it will be necessary that in addition to his specialised knowledge, he should also be able to understand and handle problems of industrial finance business administration and labour relations. As the University Education Commission has observed, the success of engineering projects very often depends as much on the knowledge of these problems as on the knowledge of engineering technology

The function of applied sciences is to adapt the universe to the needs of man, through an application of pure sciences But while applying or discovering the devices for surveying, drilling or moulding the universe the engineer has to remember that from time immemorial man has also undertaken the great enterprise of adapting himself to the needs of the universe particularly to the needs of the human society Religion Philosophy Art Literature, Politics, Economics and other endeavours of the human mind are the outcome of this complementary attempt of adapting man to the universe or of adapting human motives and emotions to the requirements of social life If the

engineer has to make his contribution to the laying down of State policy he must develop a broad interest in human affairs and feel impelled towards the perennial ideals of Truth Goodness and Beauty that have been beckoning the saints scientists patriots and poets through the generations

This is one reason why many educationists insist that an engineering college should be situated in the campus of a university That perhaps is the reason why the Jadavpur University which is evolving round the nucleus of the College of Engineering and Technology is planning to develop faculties of theoretical sciences and humanities within its jurisdiction A look at the development map of Jadavpur University which clusters engineering departments, workshops, laboratories library College of Arts and Science, gymnasium, pavilion, Polytechnics hostels, hospital and staff quarters together holds out the hope that this University will send out sound youths—intellectually physically and morally sound youths— to undertake the great tasks of national re-construction and to set an example for other citizens to emulate

The young graduates who have received their degrees and certificates today and who I wish and pray will enter into a long and creative span of life bringing happiness to themselves and prosperity to the community should never forget that in the words of the late Surendra Nath Banerjee they are the alumni of 'the first great constructive effort of the Swadeshi Movement namely the Jadavpur University

I thank you, friends, and wish you the best of fortunes

ANDHRA UNIVERSITY*

I am deeply appreciative of the honour you have done me by inviting me to address this 30th Convocation of the Andhra University I recall with pleasure my previous visit of over three years ago when I laid the foundation stone of your Geo-Physics block. I am confident that this new department has developed and prospered This was the University where my wife Shrimathi Durgabai Deshmukh, completed her post graduate course of study prior to her professional training as a lawyer On many occasions she has recalled with affection the days she spent at this University which was one among the three she studied at—the others being Banaras and Madras. This fact and my previous visit have given to my impressions of Andhra University a vividness which they might otherwise have lacked

Perhaps it will be a matter of some interest to you that this is the first convocation address I am delivering This is because for more than one reason in my capacity as Finance Minister of the Union Government, I had shrunk from undertaking any responsibility of this nature. Those inhibitions no longer operate and indeed as Chairman of the University Gran s Commission, I am now bound not to lose any opportunity that presents itself of establishing and strengthening contacts with universities and their authorities, the teachers and the students Indeed, I regard the University Grants Commission as a partner with all these in the task of remoulding and ever improving higher education entrusted to them by the country this last being formally represented by the Central

*Delivered at the 30th Convocation on 8th October 1956 at Waltair

and the State Governments. It is against this background that I shall frame my observations to you today.

I could state, appropriately at this stage perhaps that my interest in university matters has extended over more than a decade now Even as Governor of the Reserve Bank, I had occasion to refer in very broad terms to certain aspects of university affairs appearing to me to call for the earnest attention of all the authorities concerned This was in the course of a speech I delivered in 1946 in Poona on the occasion of the naming of a new commerce college. That interest has deepened with the years, and in the course of my tour as Finance Minister I seldom lost an opportunity of meeting university men and addressing them on the Five Year Plan generally and its significance to students in particular In this connection, I should like to express my appreciation of the action taken by the Planning Commission to establish and develop University Planning Forums for the purpose of associating the teachers and the students of the universities with the drawing up continuous study and implementation of the Plan to the extent to which their co-operation is likely to be practicable and meaningful. It only remains for me to add that I am genuinely happy now to be in a position to take a deeper and more detailed interest in university matters and to participate more directly and actively in the task of strengthening the cause of higher education in India.

Since assuming office, I have therefore naturally delved deeper into all sorts of literature concerning universities in general and Indian universities in particular and I have been struck by the vastness, comprehensiveness and profundity of the material available for forming judgments on all possible aspects—theoretical as well as practical, of university education. In particular I would recommend for repeated reading the brilliant 2nd chapter of the Report of the University Education Commission on the aims of university education which chapter I have no doubt, owes much to the direct inspiration of its Chairman, now the Vice-President of the Indian Union. There is such an embarrassment of riches in all this literature that there is, in my view some danger of one's missing the

wood for the trees So far as the students, in particular are concerned there is no lack of sound advice scattered through scores of convocation addresses, even a tithe of which, if read and inwardly digested will help them to discharge well the responsibility that society has placed on their shoulders as the fortunate recipients of higher education *i e* in a sense as its elite I do not feel that anything is likely to be gained by treading that well-trodden ground again. I shall confine my observations therefore largely to the best way of attending to the common task I referred to sometime ago—that quadrangular partnership of the university authorities the teachers, the students and the University Grants Commission. I feel that the nation has a right to expect that this assignation is completed to its entire satisfaction, subject only to such limitations as the nation itself is circumscribed by on account of the undeveloped state of the nation s economy It is well to examine what these limitations are so that every section of society may play its part understandingly but without a sense of frustration

Poverty is the emblem of an undeveloped country, and at every stage in its early efforts to develop its economy poverty and its various manifestations constitute a resistance which has to be overcome with understanding, doggedness and determination. The conventional index of a nation s poverty or otherwise is the national income per head and this audience need not be reminded of the painful fact that India s national income is about the lowest of any country in the world. In a country with a low national income, the rate of saving for investment is also low while the tug of the desire for an improved standard of living is strong, with the result that restraints on consumption are apt to appear irksome. This is the central dilemma of planning for economic development in an undeveloped country This is the vicious circle of low income low investment and continued low income, which has to be broken at the point of consumption by highly discriminative restraints in the society of highly disparate incomes which is usually characteristic of such a country A symptom of the retarded development of such a country is unemployment,

which is another way of saying that some of the resources especially manpower have yet to be fully utilised The aim of economic and social planning is to gear up the utilization of such unused resources in a rational way and in a progressively accelerating fashion progress being measured periodically by the forward movement of broad indications, such as, national income per head and the extent of unemployment

I consider it necessary to mention employment because in spite of very valid theories in regard to the purpose of higher education and the probably correct deprecation of the strictly utilitarian aspect of university education the business of keeping the wolf from the door must haunt every young person that passes through the portals of a university and obsession in this regard could seriously undermine his morale whilst at the university and impair the effectiveness of his efforts to do his duty during his stay there and in subsequent life Understanding of the overall situation is very necessary not only on the part of those who are or will be denied the advantage of university education but also of those who receive it but find themselves deprived by the prevailing circumstances of what they might persist in regarding despite enlightenment as the legitimate reward of a university education For a sense of frustration is apt to paralyse self reliance and action in seeking out a suitable form of activity likely to maximize the individual s utility to society whereas the success of all our plans must depend on every one giving of his or her best in the circumstances in which he or she is placed

It is with the recognition of this danger that the Planning Commission appointed a Study Group to make a special study of the problem of the educated unemployed and to formulate programmes specially designed to alleviate unemployment among the educated *i.e* with and above matriculation and equivalent educational standard This Group placed the number of educated unemployed at 550,000 and estimated with reference to all implications of the Second Plan that the size of the problem will remain substantially unchanged during the period of the Plan With reference to this quantitative estimate as also specific skills required for job opportunities and other

regional and occupational aspects the Group has suggested certain fields as capable of providing employment opportunities for the educated The schemes suggested include the strengthening of co-operative organisations in the sphere of production and distribution e g manufacturing of hand tools small tools sports goods, furniture feeder industries like foundries forge shops servicing industries like repair shops for automobiles and other machinery Schemes in relation to co-operative goods transport have also been suggested. The schemes involve a gross outlay of Rs 130 crores and are expected to provide additional employment to the extent of 235 000 persons Improvement in the present system of recruitment to Government posts has also been suggested as well as provision of hostels and establishment of University Employment Bureaux. The Planning Commission felt that the recommendations of the Study Group required to be implemented on a pilot basis in order to watch the reactions of the educated to these schemes A provision of Rs. 5 crores has been made for this purpose in the Plan and the details of the pilot scheme are being worked out. If the response is adequate the Planning Commission observes larger provision for more extensive experiment in this field could be made available Here then is a silver lining to the cloud that darkens many an educated young man s horizon.

Some general observations of the Planning Commission in this connection deserve to be quoted. They are contained in paragraph 29 at pages 123 and 124 of the Report on the Second Plan —

> Finally it should be observed that the problem of educated unemployed calls for long term measures Ad-hoc measures designed to alleviate unemployment in the short run can hardly produce lasting results. Judged from past experience, the educated remained out of gainful occupations in part due to the fact that in its evolution the system of education has not been related sufficiently to our needs of economic development. This also explains to some extent why in the midst of unemployment among the educated, shortages sometimes arise

in the case of certain categories of educated personnel. The expansion of education and training facilities should therefore be closely linked to the future requirements of the economy and the growth of educational facilities in directions which may accentuate further the problem of educated unemployed should be avoided. There should be systematic examination of openings for educated and trained persons in different categories and the necessary information should be widely disseminated through programmes of educational and vocational counselling university employment bureaux, etc. Development of the co-operative sector in the rural economy and of small-scale and medium industries will offer growing opportunities for absorbing educated persons in gainful and productive work Changes in the system of education should keep in view these and other lines of development envisaged in the Second Five Year Plan so that progressively those elements in the system of education which facilitate absorption and stimulate the expansion of employment opportunities are strengthened.

If one may hazard a guess within less than two Plan periods this particular problem should have ceased to be troublesome. In the meanwhile, and because of this prospect, it seems very necessary that universities should concentrate on the work in hand and give the students the maximum chance of benefiting from such schemes as Government may promote directly or indirectly for broadening the field of employment for them.

Speaking generally of what is expected of students in the partnership I mentioned a while ago I should say that their duty lies in understanding the process of planned economic development familiarizing themselves with its salient details and making the very best of the opportunities, by no means insignificant, that have come their way while obtaining a university education. As an expert has observed the characteristic gift of a university is the gift of an interval. Here is an opportunity to put aside the hot allegiances of youth without the necessity of at once acquiring new loyalties to take their place,

Here is a break in the tyrannical course of irreparable events—a period in which to look round upon the world and upon oneself without the sense of an enemy at one's back or the insistent pressure to make up one's mind a moment in which to taste the mystery without the necessity of at once seeking a solution

This interval only comes once in a life time and if it is lost or misused it is lost or misused for ever There will be no such leisure in later life no such comparative remoteness from controversy and from immediate purpose not another such chance to acquire the kind of wisdom which only a university can provide.

But the juniormost partner in this common endeavour cannot play his part as he should unless society assures him a modicum of comfort freedom from anxiety and amenities in which to operate. Unfortunately in this country even the irreducible minimum of this does not exist in some of the universities. There is an insufficiency of hostel accommodation, and even where this could be remedied the means to make payments for board and lodging on the most modest scale are often lacking. The facilities for a common corporate life are often of the poorest, and crowding in lecture rooms and laboratories rob teaching of any conceivable value not to speak of the impossibility of individual attention by a teacher to manageable groups of students in such congestion. Student welfare generally has till lately been neglected and there is no systematic attention paid to student health There are no student guest houses or clubs where students, especially those staying outside hostel, can gather read wholesome literature converse or indulge in healthy pastimes during the day time when they are free from laboratories and lectures. There is, however a growing awareness on the part of Government of these serious shortcomings and the question of how to help in bringing about an improvement is very much in the mind of the University Grants Commission Student associations and other voluntary welfare agencies can do something in this matter with the help of funds at the disposal of the Education Ministry at the Centre or the State Education Departments.

The efforts of the university authorities, as of the State to play their part effectively in maintaining and improving standards of teaching and guiding the students aright are cramped by paucity of funds. But within whatever funds are available—and the more earnest they are the less plentiful the resources are—there are certain matters to which they must pay attention. One of these is the intrusion of commercialism and/or politics into university affairs. The First Five Year Plan mentions fully the evil of the teacher politician who has come up as a result of the introduction of democratic control in universities, outside influences nullifying the autonomy of universities and the neglect of the national aspects of university education. It will be for the University Grants Commission to study such imperfections in detail with a view to bringing about an improvement.

It is recognised that the clamant need of the times is an amelioration in the unsatisfactory conditions of service in the universities, particularly the low scales of salaries paid to the teachers. The University Grants Commission has already taken certain steps in this direction, but further progress is hindered partly by the lack of resources on the part of some of the States for making their matching contribution

Any significant and wide-spread improvement must it is clear depend on the funds available out of the not over generous provision available in the Second Five Year Plan for education and it has become increasingly clear that the Plan is likely to stretch the nation's resources to the limit. Nevertheless even after a brief but closer acquaintance with the problems relating to university education, I have come to the conclusion that the funds allotted to the University Grants Commission will have to be increased if these and other desirable improvements are to be carried through within a reasonable period of time. Among these, perhaps the most important is improvement of the syllabus so as to introduce a course of general education at appropriate levels in order to neutralize the effects of over-specialisation and to secure better balance in higher education. The broad object of general education is in the words of the University Education

Commission, to make the student familiar with his physical and social environment and with human institutions, aspirations and ideals.

Among the more important tasks of university authorities is also the introduction of the three year degree course, which has important financial and academic implications for the course of higher secondary education. This reform will also require additional funds if it is to be completed within a reasonable period, say five years

At the end of the First Plan, the total enrolment in the universities was estimated to be little short of 750 000 and the number of students qualifying each year in degree and higher examinations in Arts and Science a little less than 60 000 This compares with about 81 000 and 23 000 in U K for a population between 1/7th and 1/8th of India s. In U K the sum spent on university education is the equivalent of Rs. 42 crores a year whereas the total provision for university education in the Second Plan is 57 crores (Rs. 22 5 crores in the State Plan and 34 4 crores at the Centre the latter including the allotment of Rs. 27 crores for the University Grants Commission) which gives a rate of a little under Rs. 11.5 crores a year These figures give some measure of the dimensions of our problems and the paucity of resources available for solving them.

But whatever the provision available—and I repeat, it has to be augmented in order to enable our partnership to carry out the very minimum effective programme of improvement—we shall have to do our very best for university education The University Education Commission observed in regard to their recommendations,—

> Many of these proposals will mean increased expenditure but this increase we are convinced is an invest ment for the democratic future of a free people There is no freedom without knowledge

Another authority on the subject has asserted that to maintain the universities of the country at a high level is an act of *high patriotism on the part of the ci ens. To them we* look for the release of the great source tellectu rgy

in a highly disciplined manner for dynamic idealism, resulting from clarity of moral outlook vitalized by intelligence.

A university man must consider himself the torch bearer of his country s culture, and our country s culture stands second to none in its comprehension of high moral values no less than in the amplitude of its philosophic outlook.

To you, graduates of the year I extend my sincerest good wishes. Some of you will go on from here to further studies, post graduate or professional. To those I wish continued and greater academic successes. The rest will pass out into the hurly burly of a highly competitive world, fearful of what life may bring them. To them I wish god speed. Their stay at the university they may find has not equipped them very effectively to earn a living, but they will have learnt something to help them lead a more significant life Be humble in your good fortune and courageous in your reverses, and wherever your lot may be cast, remember your obligations to the society which conferred on you the boon of university education.

3

CALCUTTA UNIVERSITY*

THE Calcutta University has done me a great honour by inviting me to address the Convocation which is being held on the eve of its Centenary celebrations, and which I deem it, therefore, a real privilege to be called upon to address. I do not say this in any formal sense but out of a consciousness of the special significance of the occasion.

This solemn ceremony of the Centenary Convocation serves to remind us of the noble tradition of the Calcutta University which has done pioneering work in awakening the complacent spirit of the East to the technological advances of the West. The tireless efforts of Raja Rammohan Roy and Iswarchandra Vidyasagar were directed to a reorientation of our ancient civilization in the light of modern advances in human knowledge. Asutosh Mookerjee, who was an embodiment of self-respect and self-confidence, carried on a relentless struggle for protecting the academic freedom of the University from the interference of an alien Government, and his successors have carried on the work of the University in increasingly constricted and difficult circumstances Among the teachers and alumni one comes across the names of Bankimchandra Chatterjee and Surendra Nath Banerjee of Swami Vivekananda, Pandit Malaviya and Deshbandhu Chittaranjan Das of Tej Bahadur Sapru Sir Abdur Rahim and Dr Rashbehary Ghose of Jagadischandra Bose and Acharyya Prafullachandra Ray of Syamaprasad Mookerjee and Dr Meghnad Saha and last but not least of Netaji Subhashchandra Bose These are names such as should make any successor to the tradition of this University proud of his heritage When in my mind I run

*Delivered at the Centenary Convocation on 19th January 1957

over the illustrious names of persons who have been ushered through the Convocations of the University and who are enhancing its prestige today I remind myself that our revered Rashtrapati, Dr Rajendra Prasad, who is inaugurating the celebrations to-morrow is himself among these distinguished individuals And then, among those associated with the University as teachers at one time or another are world famous figures such as Dr S Radhakrishnan Sriyuta Jadunath Sarkar C. V Raman and S N Bose.

My sense of privilege is weighed down by an awareness of heavy responsibility Until lately I have had no special concern with the academic world although I have been generally interested in, and sympathetic to, institutions of higher learning. While I have tried to be a good student of every subject that I have been called upon to learn I can lay no claim to scholarship or profound learning. Moreover addressing convocations is an art which I have not cultivated. Nevertheless as an erstwhile administrator and politician I may perhaps be able to make a few useful observations, and in any case there is another capacity in which I am expected to say something to a gathering of university students, teachers and administrators That capacity is the Chairmanship of the University Grants Commission Since the main function of that body is to promote and co-ordinate university education and to determine and maintain standards of teaching examination and research in universities, my words are likely to be interpreted as representative views, indicating the mind of the Commission. I should therefore make it clear that the views that I shall be voicing would be my personal views, although I hope that they would be such as would at least in a general way be acceptable to the Commission

It has not been possible for me to ponder much the philosophy of convocation addresses or to conduct a research into the ground covered by generations of past convocation addresses, although I confess I have often wanted to do so. I expect to find that they generally draw attention to matters of topical interest concerning universities and illuminate many a moral maxim for the citizens of the morrow Over the vista

of years the topics of interest will vary even as the idea or purpose itself of various universities as contemporaneously understood in the light of the cultural, social economic and political background whether in this country or elsewhere. My understanding of what the content of my address should be will be found influenced by these thoughts and at the back of my mind will be an awareness of the special significance that most people will be disposed to attach to my observations because of the official position I hold

In making my observations I shall remind myself that the Vice-Chancellor of the Calcutta University was one of the Members of that very distinguished body the University Education Commission, which presented the monumental report on higher learning in India in 1949 that in his capacity as Member of the Union Public Service Commission he has had very special *opportunities of adjudging the attainments and standards of the* young men passing out from universities and higher professional or technological institutions, and that finally he has been and continues to be a Member of the University Grants Commission. I shall recall that his predecessor an eminent scientist and educationist, is now Member of the Planning Commission and in special charge of the subject of Education. I need not go further back into the history of the long line of administrators who have been responsible for the affairs of the University and may safely conclude that if many improvements have yet to be made in the affairs of the University and much reform has to be carried out, the reasons cannot be lack of realization or guidance in regard to the desiderata but difficulties, the removal of which does not lie within the power of any single academic authority or, within the short term, indeed of any authority in India.

The celebration of a centenary is an appropriate occasion in human affairs for both heart felt felicitation and earnest retrospect But the legitimate feeling of satisfaction that a century of existence is behind one should be tempered in the case of universities, by the reflection that even by modern standards a university which is a hundred years old is a relatively young university Then again, India had seats of learn-

ing even more ancient than the modern type of universities. Sufficient is known about these without its being necessary for me to enter into details. I need only point out that all the ancient Indian institutions were residential in character which made possible the closest communion between the teacher and the taught. Also apparently the education was free thanks to the patronage of princes and bountiful endowments. The scholars, who were admitted after rigorous oral tests were even provided with free board and lodging Lastly as a matter of topical interest I should mention that the Nalanda University (6th Century B C. to the 13th Century A D) at the height of its glory had a thousand teachers and ten thousand students a teacher student ratio of 1 to 10 against 1 to 35 and upwards at present in the colleges in Calcutta city

It is against this background that one should reflect on the significance of the centenary of a university in India. Our modern universities are not heirs to an ancient heritage, but were innovations introduced by the British in an age when the organisation of all types of indigenous system of education including higher education had been dislocated owing to unsettled political conditions. The precursors of our modern universities were the Sanskrit colleges and the Madrasahs founded towards the end of the 18th century for the avowed purpose of encouraging the study of oriental languages, literature and laws, but in reality for training legal assistants to English Judges. Many colleges and Mahavidyalayas preceded the universities as seats of higher education of the Western type in the first half of the 19th century to be followed a little later by a few professional institutions like the Medical College Calcutta, and the Bombay Engineering School.

The history of how the first university in India came to be established would be found in the literature on the subject, especially Chapter I of the Report of the University Education Commission. The Commission refers to the famous Despatch of Sir Charles Wood to the Court of Directors of 1854 which has been described as the Magna Charta of English education in India The aim of education was enunciated as the diffusion of the Arts, Science, Philosophy and

Literature of Europe. The study of Indian languages was to be encouraged and the English language was to be taught wherever there was a demand for it both being regarded as the media for the diffusion of the European knowledge Universities were to be established to encourage a regular and liberal course of education by conferring academic degrees as evidence of attainment in the different branches of Arts and Science The syllabuses were it may be noticed to exclude all subjects connected with religious beliefs. A spirit of honourable rivalry was to be promoted among different such institutions and the division of university degrees and distinctions into different branches was intended to direct the efforts of the highly educated men to the studies which were necessary to success in the various active professions of life

The Bill to establish a university of Calcutta received the assent of the Governor General on the 24th January 1857 Universities were also established at Bombay and Madras immediately afterwards. While the Governors of their provinces were the Chancellors of the latter Universities, the Governor-General himself was for many long years the Chancellor of the Calcutta University Significantly enough, the first Indian Governor-General Sri C Rajagopalachari became the first Indian Chancellor of the Calcutta University

The jurisdiction of the Calcutta University was not originally circumscribed by provincial limits. Colleges from Bihar Orissa Assam U P C.P Burma and Ceylon were also affiliated to the University The gradual establishment of new universities restricted its sphere of work but has not retarded the growth in the number of its students. The progressively complete conversion of the university from an examining to a teaching university so far as post-graduate instruction is concerned was largely due to the vision and drive of Asutosh Mookerjee

The inexorable pressure of numbers has resulted in Indian universities losing ground in respect of basic equipment in the broadest sense of the term (*viz* quality and number of teachers accommodation especially laboratory space, apparatus, libraries, hostels, etc.) and therefore, in the

standards attained There was a time when within their circumscribed limits of responsibility the old universities of India produced alumni of as high a standard as anywhere else in the world. Competent critics spoke well of the standard of examination and of the quality of the degree conferred Writing in 1891 E. W Thomas, in the Review of the History and Prospects of British Education in India said about them On the whole they (*i.e* the degrees) denote much the same standard of attainment as do those conferred by the University of London The increase in numbers has probably affected standards adversely even in wealthier countries The Universities Quarterly of the United Kingdom has stated editorially that although opinions among university people are varied the majority hold that the best students are as good as ever and the worse no worse than before, but the average quality is lower on account of a greater increase in the lower ranges A similar but probably more emphatic judgment will undoubtedly be valid in respect of the standards of present-day Indian universities. In the ultimate analysis the main reasons will be found to be three, *viz* insufficient expenditure on university education the confusion prevailing in regard to the medium of instruction and undue emphasis on the system of year-end examinations.

This is not an appropriate occasion for me to expatiate on any of these matters, although I cannot refrain from drawing attention once again to the utter inadequacy of the funds devoted by the country to the improvement and development of higher education as compared with other countries. Whereas in the United Kingdom and the U S A., the annual average expenditure per student undergoing higher education is the equivalent of Rs. 5 000 in India it is below Rs 500. Out of our national income here in India we are probably devoting to higher education a percentage which is one quarter of what it is in U K Grave as they are these disparities will be seen to be much more serious when it is realized that our wastage by failures in examinations is about 5 times that say in U K Lastly whereas in U K., the increase in the number educated is matched by proportionate

increase in grants, with us the increase in grants is dispropor tionately small with the result that there is progressive deterioration in all directions

From the point of view of students within the jurisdiction of the Calcutta University the picture is more dismal still It is not perhaps generally realized that today this University has to look after the higher education of nearly 90 000 students a number which exceeds the total number of students in all the seven British universities One city college has over 13 300 students and five others have an average of 6,000 The colleges of Howrah across the river provide for another 18 000 making a total of nearly 60 000 for what may be called the metropolitan area of Bengal.

The number of students who have received their degrees, diplomas and certificates today is 8 822 about most of whom will be leaving the University to face the citizen s life and its problems To those who will prosecute their studies further I need say very little. I congratulate them on their good fortune and can assure them that much is being done out of the funds at the disposal of the University Grants *Commission to improve the apparatus of post-graduate* education. I doubt if lack of employment or a suitable vocation will be a serious problem for them when they finish their chosen courses. They will probably find that their emoluments or earnings will be, at least for a long time to come, disappointingly or distressingly low but that state of affairs is only a reflection of the still backward state of economy of the country

Those who have received professional or post-graduate degrees or diplomas will also, I expect fare reasonably well But for the bulk of the graduates especially in this part of the *country I fear employment opportunities will be poor* and uninspiring I have spoken elsewhere about the Second Five Year Plan and the proposals it contains in regard to improve ment of employment opportunities for the educated, and I do not intend to traverse the same ground again I should how-ever, like to take this opportunity of supplementing what I

said recently with special reference to conditions in Bengal which are somewhat special

In Bengal the middle classes have always been a more important component of the community than elsewhere the reasons being largely but not entirely historical. Although its metropolis and its environs hum with commercial and industrial activity the country-side has no other town impor *tant in the modern sense.* The result is that *prospects of* gainful employment draw young men to Calcutta young men often desirous of bettering their prospects by acquiring higher academic qualification while earning some sort of a livelihood. In a milieu of large-scale industry and commerce small scale industry and self-employment has till lately been neglected and there is excessive reliance on the part of those undergoing higher education on professional careers or clerical and administrative avocations The dead-end character of secondary education, only now sought to be remedied by proliferation and extension, as recommended by the Secondary Education Commission has left hardly any choice to the young person of sixteen who has passed the school leaving examination other than proceeding to seek admission to an institution of higher education for a better change in life especially as for many categories of jobs the minimum educational qualification prescribed is Intermediate pass or a degree. Since many a college in the country side lacks the full complement of facilities especially for honours or in science young persons gravitate inevitably to Calcutta.

This mass migration in the past was encouraged, by the educational authorities, inspite of strained resources under a public pressure difficult to resist and often out of a genuine conviction that it was a public duty to accommodate young people seeking the blessings of higher education so important to an economically hard pressed community To this already difficult complex of academic circumstance, have been added the trials and tribulations of the events that resulted in the partition of India events which have affected Bengal more adversely than any other State in India While its area and resources have contracted the burdens on it have increased

on the contrary owing to the influx of waves of displaced persons from Eastern Pakistan a movement which has not ceased to this day and of which no one can foresee the end with any degree of confidence The phenomenal strengths of colleges in Calcutta and Howrah to which I referred a short while ago are the results of these diverse influences

The Government of Bengal, the University authorities and college managements are well seized of the problem, and with a concerted effort, guided and assisted by the University Grants Commission it should be possible to do something progressively effective to relieve the congestion in Calcutta colleges

I refer to these matters not evidently relevant in the context of convocation address, firstly because I want the fresh graduates before me to know that when I address a few words of advice to them I do so with some awareness of the unsatisfactory nature of the arrangements society has made for imparting higher education to them secondly because I feel that society that is the State owes a special measure of guidance and assistance to the educated youth of Bengal on the lines indicated by the Planning Commission with reference to the problem of educated unemployed in paragraphs 22 to 29 of Chapter V of their Report on the Second Five Year Plan Bengal will have to have a considerable portion of the pilot schemes which they have recommended and for which they have promised larger provisions, should the response be adequate

There is another aspect of employment which should bring some comfort to those seeking it. Experience had shown in regard to developing economies that estimates of educated manpower are apt to prove to be under-estimates in the gross and in detail This should be particularly true of India where there were no estimates worth speaking about in regard to the First Plan and where for the Second they have been at best sectional, especially confined to the professional or technological fields. Even in those fields it is now conceded there will be shortages But in other technical fields, *e.g.*, sociological or statistical, as for instance for Community

Development and National Extension work, there exist pronounced shortages of the right type of educated people The country side's needs will soon be clamant and the conditions of work there are steadily improving What is needed, therefore is a readjustment of attitudes on the part of the city educated youth as well as a course of reorientation for them by prospective employers. On the part of the universities also a continuous adjustment of educational sights is called for so that the current needs of the nation are adequately met. In the nature of things, universities even where they are slightly ahead of society at large in discerning the ever-moving social purpose of education are nearly always behind the urgency of actual requirements. It is for Planning authorities or implementing agencies of the Plan to alert them betimes. At the instance of the Community Development Ministry I have, on behalf of the University Grants Commission, already drawn the attention of the Inter University Board to the very large requirements of educated personnel of this important executive agency of the State operating in the country side

Even where for the moment prospects of employment are dim or uninspiring, the great evil to be on guard against is frustration. Employment opportunities reveal themselves to the sanguine and not to the faint hearted. Frustration is like that bogey of the Himalayan climber, lassitude at the high altitudes, a desire for peace and rest, to give up the struggle, a surrender to which means sure annihilation.

I do not believe that the young person of today in India needs much exhortation about the dignity of labour More-over dignity attaches not to labours so much as to a realization that no one is entitled to ask another to undergo manual or physical labour for him which, in certain circumstances, he would not be prepared if able, to undergo for himself. When a politician friend of Abraham Lincoln, astonished at finding him polishing his own shoes in his country house gasped Why! Mr President, you are cleaning your own shoes! Lincoln coolly countered : "Yes, whose shoes do you clean ?"

I would now turn to matters of fundamental and permanent import, viz the duties and responsibilities of the educated the due discharge of which is all the more necessary in a country where employment opportunities for the highly educated are not satisfactory and where improvement in economic and social conditions hangs in the final analysis on the more privileged members of the community, such as the educated giving of their very best. To put it briefly the more depressing the environment the greater is the need of specially hard effort on the part of everyone particularly the instructed. In such a situation the short-comings of the instructions received should instead of discouraging, act as a spur to further efforts, if the vicious circle of poor resources, imperfect instruction and continued poverty of resources is to be broken. It should be remembered that university education is only a preparation for enlightened citizenship and that such a citizenship is a life-long business and challenge

The new graduate will be entering on his career in a dynamic society which no doubt needs competent scientists and technologists and professional men of all sorts, but needs still more basically persons of judgment sincerity integrity and diligence who can play their part well in a modern democracy

As I understand it, the functions of parliamentary democracy such as is practised in this country and elsewhere are two firstly what might be called a floating sense of right and wrong in the community by which at intervals the verdict of society is brought to bear conclusively and definitively on the actions of those who are entrusted with responsibility for the governance of the country and secondly that this verdict is made up of the personal judgments of all the adult individuals who make up the community If this is correct the importance of individual freedom of opinion which is sought to be safeguarded by our Constitution at once becomes evident. It should therefore be the particular concern of the younger generation to ensure that their intellectual independence is fully maintained and developed and is not permitted to succumb

to any form, open or disguised, of authoritarianism or dictatorship

I have already referred to the dynamism of the society into which the new graduate will be moving. This is all the more noticeable in a country like ours which has achieved independence after centuries of subjugation to alien authority and influences. Whatever the fortunes of life may bring to the individual, there is no doubt whatsoever that generations which have the privilege of living in and working for the India of today are among the most fortunate There is undoubtedly a sense of satisfaction in achievements in a country already in the vanguard of progress. There is also an exhilarating feeling of manhood in waging a war against alien rule but this cannot compare with excitement and fascination of helping to build up the economy of a backward country which has only lately achieved its independence and which is straining every nerve and sinew to make up for lost time and opportunities in the work of reconstruction and development a process which in a thickly populated country like ours means so much in terms of advancement of human welfare and maintenance of peace in this world

In a recent thought provoking article on the paradox of progress Aldous Huxley has put forward certain important propositions. These are (1) individual life is not necessarily progressive (2) human beings have an amazing capacity for taking things for granted (3) the progress which can be observed takes place in what may be called the public domain, but for all children and adolescents and for the vast majority of adults it is private life alone that has value or indeed any real existence (4) that men and women responsible for progress have always been a minority; (5) that while public life is perpetually changing private life remains enduringly the same and (6) that although progress can take place all the time it is never completely gratuitous and has always to be paid for In developing these ideas he writes If private life is not too brutally interfered with and if the bad environment is sanctioned by customs justified by religion and rationalised in terms of the prevailing philosophy men will tolerate the intolerable and will

go on tolerating it for years, even for generations and centuries." It is this apathy, this pathetic contentment, which it should be the duty of the new generation to be aware of and to make strenuous and continuous efforts to shake off

In looking around the new world of active citizenship into which the fresh graduates will have entered the first shock that they will probably receive is in finding that in the university of life what is preached is not always practised. I have great sympathy for the university graduate who after an indifferent course of instruction through his most impressionable age steps into the world of a citizen s life, lagging far behind life in other countries in minimum comforts and adequate opportunities a world where in addition to lack of the apparatus of material well-being, and in part because of it, he is likely to encounter undesirable pressures on moral values. Concretely the young graduate faced with lack of gainful occupation may also en counter in addition a low code of ethics encouraged by the scramble for advantage. Unless he is exceptionally lucky he may meet unedifying spectacles of greed for pelf or power hypocrisy and double-dealing and disregard of the rule of the law Whatever innate foundation of goodness there may be in him and whatever the extent to which it has been fostered in the case of higher education (unfortunately that extent is not likely to be great on account of modern instruction being entirely void of any element of religious or moral teahing), all that will stand in imminent danger of being eroded by a tainted environment unless he is especially on his guard. He may be driven by penury to a despondent laxness in the discharge of duty He may be encouraged by the enveloping atmosphere of business or politics or profession or administration to deviate from the high and narrow path of rectitude tempted by bad example to deal unfairly or inconsiderately with others even less fortunate than he is in other words to exploit persuaded by subtle influences to regard right means as unimportant in securing desired ends. It is in such circumstances that the educated youth of the country must by his internal individual sense of discipline reinforce whatever disciplines he may have undergone in the course of his higher education and make a stand for the

preservation of the sense of right and wrong. Apart from this sense being the foundation of democratic society it is the natural heritage of the young and it should have been developed be it be ever so little by his university education.

It is for the new generation particularly to resist the sway of bad environment to discharge their moral obligations as the elite of the community which in a sense they are. It is not given to everyone to rise to high position or to sway the course of events but it is possible for everyone to safeguard his moral values if only he means to do so inspite of every handicap and disadvantage in material sense. Indeed, it is often found that the less advantaged a person is the more acute is his sense of right and wrong. Conscience is a flame which often burns brightest in the hearts of the poor

Apart from moral values, young men at the commencement of their careers in life should endeavour desperately to retain or cultivate certain qualities. Of these I place intellectual curiosity at a very high level. Indeed since that is the outstanding characteristic of a student, the ideal would be to remain a student all one's life. It is then only that the full flavour of life can be savoured, no matter what the surrounding material circumstances may be

Another quality to be cherished and fostered is aesthetic sensibility. I have always lamented the almost universal sway that slovenliness and lack of all sense of order seem to have established over the modern Indian scene. Whatever the cause may be, no effort should be spared to combat this trend and the best instrument for the purpose is a carefully cultivated and jealously guarded aesthetic sensibility

The educated youth of today may lack the opportunities for fruitful use of knowledge and even skill acquired at the university. But no wisdom that he may have garnered need ever go waste. In the ultimate analysis, wisdom stems from the conscience and we have the authority of many great men for believing that conscience may be the voice of God.

Mahatma Gandhi said

"You have to believe no one but yourselves. You must try to listen to the inner voice, but if you won't

have the expression "inner voice" you may use the expression "dictates of reason" which you should obey and if you will not parade God, I have no doubt you will parade something else which in the end will prove to be God, for fortunately there is no one and nothing else but God in this universe."

4

NAGPUR UNIVERSITY*

NO *invitation to address a University Convocation can be* regarded as anything but a signal honour a symbol of good-will and esteem. But I should ordinarly have hesitated to accept the Vice-Chancellor's kind invitation to address this Convocation because I have already addressed three during the short period of less than two months and this will be the fourth. I recall a warning from a friend that in my present position as Chairman of the University Grants Commission I must be prepared to address many University Convocations and that after the sixth I should find that I had nothing new to say I think he was right, although somewhat optimistic I have already formed the view that, if our Constitution per mits, there should be a legal bar to anyone in this country addressing more than three University Convocations in one financial calendar or academic year and that further no one who has already addressed six Convocations in all shall address any more during his life time. Apart from the giver of the address, such a law should greatly benefit the fresh graduates.

But inspite of these views I have responded to the Vice-Chancellor's behest for more than one reason. Apart from my old friendship with the Vice-Chancellor and great regard for him and my consciousness of the earnest efforts that he is making to improve and develop the University there is the reason that Nagpur and therefore, its University have special claims on me because of my *many years association with* Nagpur and the region of which it was till lately the capital. I have watched with special interest the growth and development of the Nagpur University since its establishment in 1923

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*Delivered at the 37th Convocation on 31st January 1957

a few years after the commencement of my career as a member of the Indian Civil Service. I have rejoiced in its progress been depressed by its spells of weak administration and taken a continuous interest in the academic standards achieved by its students. The recent re-organisation of States has deeply affected the Nagpur University and made significant difference to the prospects of its graduates about to seek a living at the end of their scholastic career I feel that in such circumstances I must rally to the Vice-Chancellor s call and offer such assistance as I can by way of friendly advice

It was in January 1854 over a hundred years ago that Lord Dalhousie annexed the territories of the Bhonslas with the express object of making Nagpur cotton accessible to the textile mills of Manchester Nagpur became the ad ministrative capital of the Central Provinces of India, which were formed in 1861 and were augmented by the addition of Berar in 1903 It is not surprising in view of this history of the importance of Nagpur as a capital city that its people have reacted apprehensively to the change in its status affected by the recent re-organisation of States There can be no denying of the fact that so far as the immediate future is concerned this change does mean a sort of set back to the prosperity of Nagpur It is however consoling to be aware of the fact, that all the authorities concerned have a lively awareness of the problem and are pledged or resolved to do their best to ensure that no permanent harm ensues to Nagpur s prosperity and that after the necessary period of adjustment, however unpleasant, Nagpur will once again share in the general prosperity of the country So far as the educated young men and women of this region are concerned the new arrangement involves a different, but not necessarily a less promising field in which to seek their careers in various spheres of activity Nagpur now belongs to the largest and perhaps most advanced State in India and although competition for desirable jobs will be keener I believe that the opportunities for securing such jobs will be wider and greater In this competition the young men and women of these areas need not entertain any feelings of inferi rity about themselves as initiative in various

directions has in the past originated from Nagpur It should never be forgotten that Mahatma Gandhi himself had directed India s non violent nationalism from Wardha and Sevagram for many long years. As Dr Pattabhi Sitaramayya, the Governor of Madhya Pradesh once remarked, "It is from the dynamo functioning in the suburbs of Wardha that all new currents of reorganisation of industry and education, of social reform and national reconstruction were coursing along day in and day out, to the remotest corners of the country"

So far as the University itself is concerned, during its career there have occurred the usual vicissitudes The University started functioning on August 4th 1923 mainly as an affiliating and examining body The establishment of the University of Saugar in 1946 reduced its jurisdiction and the number of affiliated colleges. The University Education Commission in its Report published in 1949 took note of this attenuation and expressed the hope that with the reduction of its work of affiliation the Nagpur University could expand its activities as a teaching and residential university

This hope expressed by the University Education Commission has to a certain extent been fulfilled by this University in as much as they have established seven new departments or institutions of post graduate teaching and research. The Second Five Year Plan of the University visualizes a further development in their activities in pure science as well as in applied science, arts as well as professional subjects. They also have an ambitious programme for the construction of hostels and recently I had the pleasure of laying the foundation stone of one hostel building towards the construction cost of which examiners of the Nagpur University have contributed a share of their examination fees. Such a spirit of corporate enterprise among the teachers and the taught should prove to be a stimulating example in the academic world of India. So far as the Nagpur University is concerned, it is bound to influence for the better the growth and development of the University

While discussing the progress of Nagpur University I must not fail to pay my tribute to the memory of the late Shri

D Laxminarayan of Kamptee who created a solid foundation for teaching and research in the Basic and Applied Sciences by bequeathing a princely sum of money to the Nagpur University

So far as the University Grants Commission is concerned the Nagpur University has like the other universities forwarded its Five Year Plan of development. During my visit to the University in October last I have discussed this Plan with the Vice Chancellor and other authorities and have also indicated that if on a review of the Plan as forwarded the present Vice-Chancellor who took over his duties only a year ago feels that any modification is called for I shall be happy to place any suggestions that I might receive in this respect from the University before the Commission.

The principal purpose of convocation address as I conceive it, is to offer some help by way of advice to the fresh graduates about to seek their worldly fortunes in life after having finished seeking their intellectual fortunes' in the University On such an occasion it is perhaps inappropriate to enter upon any extensive discussion of the various aspects of the problem of university education in this country Never theless, it will not perhaps be altogether irrelevant to refer howsoever briefly to some of these, as the manner in which the fresh graduates will be able to face the world is bound to be influenced by the kind of instruction and education that they may have received during their passage through the University and as an awareness of these problems on their part is likely to enable them to make up in subsequent life by special efforts what they might have missed as a result of deficiencies in their university education On more than one occasion I have referred among these problems, to the inexorable pressure of students for admission to colleges the necessity for reducing the teacher-student ratio the desirability of improving the conditions of service for the teachers, the confusion caused by the uncoordinated change in the medium of instruction the advisability of introducing Three Years Course and a course of general education as early as practicable the deterioration of standards owing to the excessive predominance of the year end

examination system followed in Indian universities the shortage of library, laboratory and hostel accommodation the need of diversifying and upgrading secondary education; and finally the root cause of all the major problems—the paucity of funds resulting from poverty of resources in the economy of an under-developed country

However these are matters in which most of the graduates who have received their degrees to-day will henceforth have no direct concern. If things have been not entirely satisfactory in the past there is nothing that they can do except, as I said a little while ago, bear in mind that their instruction and education has not been carried out as fully as it might have been, and to try to make up for the shortcomings in their future life as far as it lies in their power So far as the future prospects and development of the University are concerned, they will be interested both because of the possibility of their near relations availing themselves of university education after them and as citizens of the country Those who intend to stay behind and pursue their education in the post graduate stages will no doubt contribute their quota to the teaching staff and will therefore, have a more immediate interest in the broad question of maintenance and improvement of standards of higher education.

I shall assume that the best part of to-day's graduates will be making efforts to seek a suitable career in life The success or its opposite which will attain these efforts will depend as much on the opportunities which the circumstances of the country will furnish to them in coming years as on their endowments, attainments, attitudes and awareness of social purpose

In my previous addresses at other universities I have touched upon some of these matters particularly the question of employment opportunities for the educated. I should like to reiterate here my belief that these opportunities will prove in actual experience to be wider than has been forecast that particularly in regard to technical personnel of all kinds there is a persistent failure to evaluate correctly or a tendency to under-estimate, the strength of technical personnel required

in various fields of planned endeavour I believe that a comprehensive estimate of requirements of personnel at all levels, both direct and indirect has to be worked out, and as a consequence those who would seek instruction of an appropriate kind in order to qualify and the institutions which are likely to provide for such instruction are both lacking today in adequate guidance Fortunately there is a growing awareness of this in official circles and at the highest level the authorities have started supplying detailed information to the University Grants Commission in regard to the type and number of personnel required as for instance for Community Development work so that the attention of the universities and those in search of employment may be drawn to these needs. The numbers involved are quite considerable making a total of 58,000 of various categories for the country as a whole Detailed information in regard to these job opportunities from the point of view of educated youth and requirements of technical personnel from the point of view of the authorities should be available on reference to the Central Ministry concerned *viz* Ministry of Community Development. To cite another instance it has been brought to my notice that a shortage is likely to be experienced in regard to the supply of statisticians of various sorts and that at least a 50% increase in existing training facilities in this subject is called for at the universities and at various other specialised institutions

Apart from opportunities for service gradual implementation of the Plan, particularly that sector of it which is concerned with industries should bring, as a result of a combination of factors such as technical training, technical guidance supply of finance, organisation of marketing facilities many more opportunities of employment for educated youth especially those who received some technological training. I should like to draw particular attention to the earnest efforts that are being made in the field of small scale industries by various Government agencies at the Centre and in the States. I believe that it would be very much worth while for the new graduates to study this particular aspect of the question after first reorientating themselves, especially with a view

to abandoning the somewhat hackneyed field of service for the initially somewhat uncertain and difficult, but ultimately more gainful, fields of self-employment in small scale industry under the sympathetic wing of special agencies of Government.

Apart from the immediate question of employment prospects there are cer ain general matters of which those who are entering upon their career as citizens must be aware. The most important of these is the question of self respect as a worker and in consequence of turning out the best work that one is capable of no matter what circumstances one is placed in. It does not matter whether this is regarded as an aspect of an individual s self respect, or of a social duty, so long as the resolution is there the results are bound to accelerate by a degree difficult to predict the march of the economic development of the country While it may be correct that the advance of culture and civilization in the world is largely due to the ideas and actions of a gifted few it is equally true that the general progress of a country along the lines which are from time to time accepted as the pattern of development depends entirely on the cumulative value of the work of the ordinary citizen, no matter how high or low he may be placed in the scale of life In this sense the prosperity of a country is the function of the standard of conscientiousness and honest diligence as well as ability and competence, of its average citizen.

I have found by experience that one of the most valuable habits that a human being could cultivate especially youth, is that of introspection. There is no one, in my opinion, who is not better off for occasional spells of introspection to evaluate one's qualities and performances in the light of a review of what is going around in the community So far as the fresh graduate, about to launch on his career in the unchartered sea which is world is concerned such an introspection is perhaps all the more necessary The beginning of such introspection could be a review of what the university education which has just been completed is intended to mean for him. In other words it is desirable for the fresh graduate

to consider or to be reminded of, what the purpose of his university education has been.

Here is what the Planning Commission have to say about education in general, "The system of education has a determining influence on the rate at which economic progress is achieved and the benefits which can be derived from it. Economic development naturally makes growing demands on human resources and in a democratic set up it calls for values and attitudes in the building up of which the quality of education is an important element. The socialist pattern of society assumes wide spread participation of the people in all activities and constructive leadership at various levels." After surveying the programme of education during the Second Five Year Plan they went on to say 'Our survey has shown that in every field tasks of great significance for the future of the nation have to be accomplished .. Behind these tasks lie more fundamental aims With so much lost ground to recover to advance rapidly the nation needs unity co-operation in all fields and a high spirit of endeavour Modern economic development calls for a wide diffusion of the scientific temper of mind a sense of dignity in labour and discipline in service, and a readiness to adapt new techniques and new knowledge to the needs of the people These values and attitudes will be realised in every day life in the measure in which they are expressed through educational ideals and practice"

Referring specifically to universities the University Education Commission observed in 1949 'They (universities) have to provide leadership in politics and administration the professions industry and commerce They have to meet the increasing demand for every type of higher education literary and scientific technical and professional. They must enable the country to attain in as short a time as possible freedom from disease and ignorance by application and development of scientific and technical knowledge. India is rich in natural resources and her people have intelligence and energy and are throbbing with renewed life and vigour It is for the universities to create knowledge and train minds who would bring together the two, material resourses and human

energies. If our living standards are to be raised a radical change of spirit is essential."

What should a graduate have acquired at the university not in the nature of learning or knowledge but as part of the development of his personality and character? According to one educational expert the harvest of the university to a student should include, discipline of the mind, grasp of consequences and command over his own powers as a result of self-revelation, an immunity from intellectual hooliganism, a capacity to see some meaning in the things that have greatly moved mankind, the location perhaps of some centre of intellectual affections, the ability not so much to live effectively as to lead a more significant life, an extended moral sensibility and finally some stable values in regard to life In the field of knowledge and learning, if a graduate in arts he should have some understanding of science. If scientist or a specialist, he should have a concern for and understanding of the values on which society depends. In other words, all students should have some idea of man s common stock of knowledge, as for instance, the origin and growth of civiliza tions, history of the alphabet or of numbers science charac ter and functions of language and the like and especially the contribution India has made through the ages to the world s culture and civilization. The graduate should have learnt how to cultivate some spaciousness in his life, no matter what subjects he may have studied *i.e.*, to appreciate a great book or a good man. As another expert has said "A man needs for his own happiness and spiritual health constant experience of the great work of the human mind and of the great workings of human nature in daily life. We all need for our own salvation to meet good people, to read great books and hear great works of art. Continuing enjoyment of goodness and greatness is essential to us in our youth and at all times of our lives" As part of his mental make up a student should have learnt to value freedom of thought and utterance, pertinacity in following the argument where it leads, accuracy in noting and recording evidence a judicial temper in approaching con troversial questions, a respect for opponents and a sustained

effort to understand them and likewise for the individual as the possessor of rights and responsibilities.

This is a formidable list, but then to be a good citizen of a great nation is a formidable business. If introspection reveals shortcomings in regard to the above desiderata all is not lost. There is the larger university of life in which the process of self perfection can continue perhaps with greater determination and unhampered by the headiness of adolescence

At the cost of being regarded as didactic, I venture to draw attention to the need of cultivating good manners—a quality which is apt unaccountably to suffer an eclipse in the collective irresponsibility of the interval of life occupied by higher education. This is a quality which cannot be put on at will, but has to be so cultivated as to become second nature. It is really a complex of qualities, including courtesy considera tion, tolerance, humility and sincerity In the ultimate analy sis it is a concomitant of man s natural desire to be respected a respect which he is therefore prepared to extend to others.

Perhaps I owe an apology to the graduates present here for my implicit assumption that they need all this homily from me. No one will be more delighted than I to discover that all this is uncalled for and that these young men fully intend to enter upon life with a due sense of what they owe to them selves their families and society at large I shall conclude by offering my congratulations and best wishes to them all.

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NATIONAL ACADEMY OF SCIENCES*

I feel greatly honoured by your invitation to preside over your Twentysixth Annual Session. I accepted the invitation not without a certain amount of diffidence as I was not quite sure if I had the necessary authority or professional competence to preside over the deliberations of a body like yours. It is true that my education included an Honours Degree in Science at the Cambridge University, but, alas ! that was nearly forty years ago. And in this dynamic present day world of ours in no field of learning has there been more rapid advance and development than in science. I fear that I did not follow up my early pursuit of science and have strayed into many other fields including politics. I however recalled to my mind a pregnant sentence uttered by Sir Edward Appleton in a recent broadcast in London which was Science is too serious a matter to be left entirely to the scientists." That emboldened me to accept your invitation.

At the outset I must pay my tribute to the memory of the founder of your Institute Dr Meghnath Saha, who passed away last year I had the privilege of coming into contact with him in the Lok Sabha and was deeply impressed by his burning zeal for science his intense patriotism and uncom promising advocacy of what he regarded as the truth. Quite early in the course of our acquaintance he drew my attention to the stupendous advances that the U.S.S.R. was making, as personally seen by him on a visit to that country by means of a purposeful application of science in all its branches to the

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Inaugural address delivered at the 26th Annual Session on 3rd February 1957 at Aligrah.

thousand and one aspects of economic and social developments. I have reason to believe that he was somewhat dissatisfied with the range and dimensions of our own planning particularly in the scientific, technological and industrial fields I know that he had at heart the establishment of an Institute of Geo-physics in order that the country might be self sufficient right from the beginning of all stages of oil exploration and oil exploitation. In regard to the development of atomic energy for peaceful purposes also he was not entirely content with the arrangements in existence and on more than one occasion he passed on to me his criticism of some of the developments in that field in progress which I would do no more than forward to the Chairman of the Atomic Energy Commission. I recall that in a conference on the subject held at the National Physical Laboratory he gave frank expression to dissident views on current efforts in conformity with the best scientific tradition. I share the grief that the Academy must be feeling on the passing away of the founder who was undoubtedly among the most brilliant scientists that India has produced

I am sorry that I have had no occasion in the past to study in any detail the work carried out by the Academy and its members during the twentysix years of its existence. I notice that the objects included, apart from the cultivation and promotion of the several branches of physical and biological sciences the undertaking through properly constituted committees such scientific work of public importance as the Academy may be called upon to perform and to cooperate with other organisations in India and abroad, having similar objects. I notice that the Academy publishes its proceedings in two series—one for physics, chemistry and mathematics and the other for biology geology and medicine Not being an active scientist and, in any event, in view of the continuous specialisation in sciences it would not have been possible for me to have passed any opinion on the quality of the research work published in these proceedings. I can only express the hope that they are thought well of in the scientific world and make their own contribution to the progress of science in the

world, "since science is essentially a collective enterprise and communication is its life blood.

The year that has elapsed since the last annual session has seen many developments which should be a matter of satisfaction to Indian scientists. Taking an individual matter first, I read in the press that the American Academy of Arts and Sciences will award its biennial Rumford Premium to an Indian scientist, Mr Chandrashekhar professor of theoretical astrophysics at Yerkes Observatory of Chicago University The reported citation for the award refers to a work on the radiative transfer of energy in the interior of stars. I take the liberty of quoting it as it struck my imagination greatly "for extending to the cosmic realm the stochastic laws which on atomic scale govern phenomena of heat and for his monumental work on radiative equilibrium of stellar atmosphere in which heat is transported as light and light supports matter and matter is ultimately the source of heat itself"

The next development I shall refer to is the completion and the forthcoming opening of India's Atomic Energy Reactor near Bombay It is a matter of pride for India that she should be in the forefront in the attempts to utilise atomic energy for the purpose of peace. This is specially so as it was an Indian scientist, Dr Homi J Bhaba, Chairman of the Atomic Energy Commission of India who presided over the historical Geneva Conference on the Peaceful Uses of Atomic Energy a Conference in which seventytwo nations participated and which broke the unnatural barriers which were created during the war and the post war period contrary to the spirit of free enquiry and discussion and communication which is the life-blood of science Although it is not difficult to understand the motives of the nations concerned in enveloping the research activities of the scientists in this field in the interest of national security it is worthwhile noting that science and its application in this field did not stand still in their separate and somewhat isolated developments. Although during the war there was cooperation between the British and American nuclear scientists in work carried out in the U.S.A during the war on account of the operation of the McMahon

Act until recently the benefit of American experience was denied to scientists in other countries including United Kingdom. Nevertheless the nuclear scientists of Great Britain went sufficiently ahead in their researches to enable British nuclear engineers to employ the basic data of the scientists in designing nuclear power stations to enable industry to build a nuclear furnace for operational use. I refer to the Calder Hall station claimed to be the world s first electric generation station of normal size operated by a nuclear furnace instead of by a furnance burning coal or oil

It was at the Geneva Conference that Dr Bhaba while addressing the distinguished gathering referred to the possibility of obtaining thermo-nuclear energy from controlled fusion of light elements like Hydrogen Deutrium Lithium and others within next twenty years. His prediction found support later from the leading scientists from several other countries. The success in obtaining fusion in conditions other than explosion of Atom Bomb will be a great step in harnessing a source of energy which would be inexhaustible since the materials which could be fused together are present on earth in far greater abundance than fissionable materials like Uranium and Thorium

It is testimony to the strenuous researches that scientists of all nations are carrying on in this field, that at the present moment there are at least six types of reactor or furnace which are being used for producing electric power from atomic energy and these six varieties we are told can be sub-classified into as many as 900 classes.

It is tempting to indulge in a little speculation on what this development could mean for an under-developed country like India. *One likes to think that India, having large ores of* Thorium will be in a specially advantageous position to set up power furnaces using U 233 as fuel. We have the authority of Sir Cock Kroft for the calculation that Britain in the year 2000 A.D would be able to meet all its demands in energy by consuming only 250 tons of Uranium or Thorium which would be equivalent to 250 million tons of coal. Also there

is the possibility of the emergent shortage in the world supply of combustion fuel which might be met by producing the greater part of electricity supply in nuclear power stations consuming two or three thousand tons of Uranium or Thorium a year for this purpose. Then there is the possibility of Plutonium in the nuclear ash of nuclear furnace being used itself as a nuclear fuel, since chemical engineers have in Great Britain succeeded in extracting it from fuel rods effectively and safely

While the long term prospects for humanity appear therefore, to be promising so far as the supply of energy and power is concerned prudent scientists, as for instance Sir Edward Appleton, had entered a caveat against the popular impression that the use of nuclear energy will develop so swiftly that one need not worry about other fuel supplies in the future According to him, Britain,he was talking of Britain alone will need all the coal that she can get for many years to come. He also pointed out in this connection an important task for the fuel technologists namely to track down the various routes by which heat is wasted in factories Apparently by an enlightened practice based on expert advice in this matter many firms have effected significant reductions in their coal consumption. He refers to an estimate that if such practices were to be followed by the whole of industry the saving to Britain could be as much as 10 million tons of coal a year which according to him is more than what nuclear fuel is likely to save altogether for Britain in the next 10 years. The opinion that I have quoted holds a moral for us, which I hope will not be missed, in spite of the fact that recent geological findings point to the availability of larger resources of good quality coal in India than was estimated uptill now

The third important development in the country during the last twelve months has been the constitution of the panel of scientists for advising the Planning Commission Probably all present here are aware that the first session of the panel was inaugurated by the Prime Minister on the 10th December 1956 when the panel had a general discussion and then constituted its committees to deal with the programme of research in different fields, such as industries minerals, fuel power and

communication railways roads buildings and construction statistics standards quality control and technical man-power irrigation agriculture soil conservation and forestry and health, animal husbandry fisheries and biological research I learn that the recommendations of the different committees are being processed and collated for further action. I have no doubt that as a result of this organised and systematic consultation with the scientists a coordinated and well-directed *individual* or *team onslaught by scientists will be made on* research problems of great practical importance in the development of our national resources. There will be research problems allotted to universities as well as specialised governmental or industrial or research organisations, and there will be coordination for bringing together in a meaningful way and extending and applying the results of all this research activity

I have referred to these matters in some detail in order to bring into relief some of the issues connected with the pursuit of science on which there is either no universal agreement or an agreed mode of practice especially so far as universities and other scientific institutions for higher scientific and technical education are concerned. Of these issues the basic issue of whether the world needs more of learning in the humanities or in the science appears to me to be largely theoretical. In my opinion the answer is easy in view of the well recognised truth that while scientists produce tools for achieving plenty for the world they do not and cannot control their use. They can only expand as they can do their use and to tell those in charge, which in democracy means everybody of the dangers which misuse may bring

So far as the citizen is concerned, the major judgment will always be in regard to the manner in which human beings are willing to live together and the moral and spiritual values they revere. The determination of social values is essentially the field of learning in the humanities. The first proposition then to lay down is that society needs both the humanities and the sciences, that it is as essential for society to have its basic working philosophy of life and to determine the principles and priorities first as to have at its disposal men who know how to

extract the utmost from nature and the material world for the advancement of man's prosperity In the form in which the antithesis is usually stated namely, humanities versus sciences, manifestly it is false But what is perhaps true is that, as I have said before, whereas science in the aggregate is in a rapid state of development philosophy taking the leader in the field of humanities, is often apt to be in the doldrums on account of the eternal uncertainty which will always be attached to human sets of values. Here is what a humanist has recently said about philosophy : Thus the philosopher every bit as much as the historian and the economist must revise his ideas and methods fundamentally if they are to mean anything in the new kind of social situation, and to the new kind of student, which are being brought into existence by economic forces beyond our control. We humanists have thus a choice to make We can go on thinking and teaching as before to a dwindling minority of students, deny the majority any contact with the substance of our tradition, and wash our hands off the problems of the world *Or* we can resolve to make that tradition available to the new kind of scientific undergraduate at whatever sacrifice of its old forms and our own efforts."

In contradiction to this hesitant modern practice and uncertainty to face achievements, the scientist always reaps the benefit of rapid advances in his subject. In consequence he is more confident about the value of his work which he finds satisfying and exciting. I quote Sir Edward Appleton again, "A bored scientist is very rare bird "

The issue therefore is not qualitative so much as dimensional and in view of the planned economic development which is so prominent in the modern world but according to its particular systems of government in every nation an increasing emphasis on scientific instruction becomes inevitable. This emphasis is, as may be expected most pronounced in the countries which operate an authoritarian system of Government but even in these countries as Dr J C. Ghosh, Member Planning Commission pointed out in his Foundation Day Address to the Central Institute of Education Delhi recently even higher scientific courses which last for four to seven years

contain a literary element, and a foreign language and sometimes history or literature have to be taken up Nevertheless it remains true that in these countries as for instance Russia, the aim is to produce the maximum number of scientists for a technological society An authoritative estimate made in the U.S A shows that in this decade Russia will produce 12 lakhs of science graduates to 9 lakhs in the U S.A and a much smaller number in Great Britain I have no comparative figures for India immediately at hand, but according to the National Register of Scientists and Technologists (which apparently is not complete) as on the 1st December 1956, there were 25,516 scientists and technologists, the number of science graduates being estimated at a little over 32,000 I must refer to another estimate which was mentioned in a letter recently written to the *Statesman* to the effect that there are about 80 000 B.Sc. and 20 000 M Sc as against some 27,000 graduates in engineering and technology in this country

The exact calculations of the number of scientists India has and the number she would require for her planned development are no doubt being made and will continue to be made by the various study groups working under the guidance of the Planning Commission It is however necessary for research scientists to have a general picture of the situation. In this respect generally and particularly in regard to the number of competent and qualified science teachers available Dr J C. Ghosh gave the number of qualified scientist teachers in Russia today as something over 2 50 000 as against 50 000 in U.S.A. and 20 000 in Great Britain. When the precise figures are known it would probably be realised that in this as in many other critical fields there is a very serious shortage in India.

This leads me to certain questions which are a concern not only of the scientists but also of the universities, and, therefore, of the University Grants Commission. The most important of these is the question of the relative emphasis between fundamental science and applied science. The universities are the traditional home of fundamental scientific research as part of the quest for new knowledge and discovery

In India fundamental research has always held a great attraction for the scientist teachers but it is to be seriously considered whether Indian universities have gone rather too far in favouring fundamental research or in paying insufficient attention to applied science In considering this matter scientists are bound to take notice of and pay attention to what the highest authorities in charge of the governance of the country have to say in regard to the manner in which scientists can contribute to the improvement of our economic position in a highly competitive world and to help them to raise the standard of living in the country in its march towards the declared ideal of a socialistic welfare state Science may have its basic freedom, both in the national and international sense but the application of scientific effort to the advancement of national welfare is a matter of consequence to every citizen including the scientist.

India is at the threshold of industrial revolution The age-old agricultural economy is yielding place to an aggressive and dynamic economic calling for the maximum and integrated development of all human and natural resources. The dominant role in this phase of development will be that of the scientist and the engineer While basic and fundamental research is necessary for the valuable stimulus which it provides for technical research actual application of such research for the evolution of new processes or products is essential, because without it research may become sterile. In the U.S.A where research utilisation has reached the highest level of efficiency special attention is given to the training of personnel required for transferring results of research into industrial operation. At a time when the Government is expanding the nation s industrial base and providing funds much larger in comparison to what went before, to foster research in the implementation of the plan to utilise the material resources of the country every means of enhancing the relationship between industry and scientific research demands special consideration

It is said that much of the research effort in India is organised on an "individual" plan, that is, one or two research workers to one problem in a laboratory The worker concerns

himself solely with research in the laboratory and having attained a theoretical or applied solution of the problem, he shifts his ground to another problem. Consequently a large proportion of research remains unproductive This pattern, however is slowly changing The industrial progress in the Five Year Plan has inducted into the research field a greater sense of reality There is now a discerning shift in emphasis from individual problems with undefined objectives by individual scientists to problems with specific objectives arranged according to priority basis teams of research workers being deployed to work on individual problems so that practical results may be achieved within the shortest possible time This new approach to research should cut across water tight compartments within laboratories and should bring institutions research laboratories and scientists of diverse specialisation together in a common endeavour This strategy may be likened as Prof Bernal points out, to a military manoeuvre Groups of research workers 'carrying out investigations in different fields are like sorties of soldiers who attack the enemy at different points each attack gives information and experience which changes the tactics and information collected helps other sorties and overall strategy of the army "

This does not imply any restriction on the scope of research The objective is to concentrate maximum effort to a specific and well-defined end We should make a close study of ways and means to make research more productive more economical and thus of greater use and benefit to industry and the country as a whole Remarkable progress has been made in this direction in the United States in institutions like the Mellon Institute Armour Institute etc where the application of Team Research Plan has shown excellent results

The development of the co-operative method of research by team work for scientists with varied disciplines has had a tremendous effect on the American industry and the American way of life

India is fast becoming an industrialised State and Government has emerged as an active promoter of industry

and a major employer of scientific and technical personnel. It is therefore becoming increasingly important to harness scientific research for the economic development of the country Results of scientific research must be utilised for raising industrial productivity It is not enough for a scientist to pursue his research in an attitude of unconcern. As scientists were exhorted by the Prime Minister when he inaugurated the 44th Session of the Indian Science Congress last month they must descend from their ivory tower and concern themselves with the effort of their own discoveries on the destiny of mankind. They must do what they can to ensure that they help in stimulating development for plenty and peace.

India s rapid industrialisation requires that research workers should be sufficiently trained to diagnose the symptoms of the lack of health in any particular industry and then prescribe a specific remedy best calculated to effect recovery so that the industry may receive the immediate benefits of research. For upon the response which those in charge of industries make to the tremendous opportunities afforded to them by science depends our industrial future

A special emphasis should also be laid on the necessity of bringing in engineers with the necessary skill and research out look into scientific institutions. Greater numbers of engineers and more planning of research programmes would help in shifting the emphasis from pure research to fundamental work. According to a survey carried out in U K about 1/3 of the university graduates engaged in applied research are engineers and the rest other scientists. The proportion of engineers on the other hand engaged in research in India, is very poor indeed In India we seem to have concerned ourselves for too long a period with pure science and its endless frontier It is time we stripped science of its romanticism put it to work in the *context of local circumstances and resources and produce* results We should take up the immediate development of specialised branches of engineering which puts science into action, so that we may reap the benefit thereof even in the present generation.

The bulk of new investments proposed for the Second

Five Year Plan period relate to basic and heavy industries. As you are aware, it is proposed to set up two or three fertiliser plants and multi-purpose lignite fertiliser power projects besides the expansion of the production of steel machine tools machinery for textiles, cement, sugar paper heavy electrical equipment automobiles, locomotives, ship-building, etc. I mention this because it is not always realised that there is a connection between educational standards and opportunities for employment in the country Where there is more opportunity there is usually more ambition and where there is more ambition there is an incentive for effort and improvement. As the country becomes able to provide new irrigation for her fields, generate more power for the expanding industry there will be a need for more engineers and scientists For the present, India remains, relative to her needs and potentialities, an industrially undeveloped country It is expected, however that during the Second Five Year Plan period investment in industry and mining may go up to more than Rs 12 000 million or 1/5 of the aggregate investment envisaged over the Five Year period. This should provide more employment and therefore more incentive for work. Side by side with this, the university population of India has gone up In the first year of independence there were nearly 2 30 000 students in Indian universities. This number today has gone up beyond 7 50,000 The number of pupils in technical and vocational schools has similarly risen to about five times than that in 1947

Education in India must serve both the practical needs of a resurgent nation and the intellectual demands of a people with a long tradition of learning and intellectual enquiry It has been realised by many educationalists and political leaders including especially Mahatma Gandhi, that in a large country the majority of whose population live in rural conditions and depend upon agriculture for their livelihood education should not be too bookish and academic but should be related to the living needs of the people.

One more aspect of industrial research may be touched here. One of the most urgent problems facing us is how to

ensure rapid and fruitful application of knowledge derived from scientific research Businessmen, foremen and operators who could profit by such knowledge are usully too fully pre-occupied with their routine work to become familiar with the advances on technological front It is not that they do not value such knowledge, but they have little time to go through the huge literature which is coming out from laboratories. This material therefore may have to be sorted out for them by some other agency Probably the Government had this in mind when they established the National Research Development Corporation of India whose function is to bring new inventions to the notice of industry The aim of this organisation is to translate research "know how" to commercial processes and products There is no denying the fact that at the present moment Indian industry has not been making full use of the results emerging from our research institutions Research utilisation cannot be ensured so long as economic and technological implications of research in laboratories are not fully established to the satisfaction of industry

Such conferences, as yours, which lead to honest exchange of information and establish personal contacts among the scientists working in the same and varied fields can be more instrumental in bringing prosperity and peace to the community than any political or social gatherings. Such conferences should be more frequent to inculcate the spirit of healthy rivalry in research amongst various workers in the universities

I think you will expect me to say something about the contribution of the University Grants Commission towards the development of higher scientific and technical education. During the years 1953-54 and 1954-55 the Commission then non-statutory (first established in December 1953) disbursed Rs. 42.5 and Rs. 96 86 lakhs for the development of science, including engineering and technology For 1955-56 and 1956-57 the total will be Rs. 1 16 crores and Rs. 1.31 crores respectively and the hope is entertained that the Commission would be enabled to augment this substantially in the coming financial year Detailed investigations of the needs of the

universities carried out by expert visiting teams have revealed that

(1) The universities have been starved of funds in the post war period in spite of the fact that their requirements increased owing to the rise in number of students The universities were ill-prepared for this large influx.

(2) The laboratory stocks in valuable chemicals and equipment looked depleted. Whatever apparatus there was had worn out. The replacement of equipment and essential chemicals, most of which came from foreign lands was not possible even in the post war period, as most of the manufacturing countries had their own needs to meet and shipping space was *not easily available* *Thus not only no new equipment* could be added for several years but the old stock for want of repairs and replacement of worn out parts was getting less serviceable

(3) Laboratory space was inadequate for the large numbers which had come for admission in the post independence era. With independence the importance of science and technology came to be realised more and more and larger number of students wanted to take up science for preparing themselves for varied professional careers Over-crowding was more noticeable in bigger universities and particularly so in border Universities of Punjab and West Bengal.

(4) Libraries were ill equipped to meet the growing demands of post graduate students. The deficiency was more noticeable in journals and especially in their back numbers

(5) With the larger admission in universities, the number of teachers had not proportionately arisen on account of lack of funds, with the result that teacher pupil ratio which was never good became poorer still with the result that even in practical classes there was no personal contact between the teacher and the taught

Appreciating the above shortcomings the Commission

allotted priorities to various schemes such as libraries, scientific equipment for rehabilitation and replacement of old worn out apparatus in addition to improve and strengthen the existing facilities laboratory buildings, fresh schemes either for expand ing present departments or to establish new departments of study and recurring expenditure for maintenance of laboratories and providing additional staff.

There are certain difficulties in expediting the building programmes which are being overcome. In spite of these difficulties it has been possible for the Commission to sanction new buildings for the departments of physics, geology and polytechnics new science blocks large expansions have been sanctioned for the department of botany zoology physics, chemistry etc. The Commission has not confined itself to old schemes only but has helped the new projects and encouraged the universities in taking initiative in starting new fields of activities as for example, oceanography marine biology marine geology geo-physics, astronomy and astro-physics, agricultural botany, applied physics and electronics

The Commission is currently engaged in taking decisions in regard to assistance for the development plans of the various universities. It is expected that with the matching contribution provided by State Governments it should be possible to allot to the universities adequate funds for carrying out the plans that they have in contemplation Unfortunately the same cannot be said of engineering and technical education for which additional allocations appear to be necessary

I conclude by expressing the hope that this Session of the Conference will contribute materially to the furtherance of the aims and objects of your Academy with an amplitude and in an atmosphere of national activity beyond the dreams of the founders.

6

GRAMDAN SEMINAR AT HYDERABAD*

I am very grateful to the organisers of this seminar for inviting me to participate in it and I am very happy to have this opportunity. I have long been interested in agricultural problems having at one time been a Settlement Officer and having in the course of the settlement, inspected personally 2,750 villages and fixed the land revenue and rents of everyone in an area of nearly 5000 sq. miles. I am a cultivator at heart and am never so happy as when I am treading on ploughed land. After my becoming Member of the Planning Commission and the Union Minister of Finance in 1950 my interest in these matters naturally grew and in 1952 I had occasion to discuss Bhoodan philosophy and practice with Shri Jai Prakash Narain in the house of Acharya Kirpalani in New Delhi. I remember to have told him that the idea commended itself to me, as legislation for the redistribution of land could never be so comprehensive or indeed equitable except where the free consent of the land holder who is giving up land has been secured, which Bhoodan naturally secures. During the course of our tours during the last five years my wife and I have seldom missed the opportunity of finding out what progress was being made by the movement, especially how the after-care of the surrendered land and villages was being organised. When Sjt. Prabhakar and Sjt. Reddi called on us in New Delhi and gave us some account of the progress of the Gramdan movement in Andhra Pradesh and enquired about the possibility of our being able to participate in a seminar that they intended to call here we gladly accepted in principle and in this we were helped by

*Address delivered on 5th June 1957 at Hyderabad.

the fact that according to our tour programme, we had already planned to be at Hyderabad during these days.

I agreed to participate in the Seminar principally with the object of acquainting myself with the progress of the movement in detail and the organisation of the Gramdan properties although I hoped that my extended land-reform and settlement experience might enable me to make a few practical suggestions to the Gramdan workers.

I find that apart from the detailed account from the Secretary of the Sarvodaya Sewa Sangh and the papers prepared for the Seminar, the discussion covered the theory or ideology of the Gramdan movement as well as the possibility of its extension. So far as the theory is concerned, although there is no self-contained literature setting out the ideology of the move ment sufficient has been said in the course of the Seminar to indicate its coverage since the ultimate objective is stated to be the pooling together of all kinds of property of the residents of the country with a view to redistribution according to the needs of each family The immediate objective, of course is more restricted, only as a step towards the ultimate objective, and that is to pool together property in land only so that it may be redistributed with inferior holding rights derived from the community and subject to periodic review

In regard to the theory of the matter one person's view is as good as another s and the final judgment to be arrived at by an individual must be his own. Nevertheless we in India have recognised the importance of the guidance of great, original and saintly persons reflecting the value of their experience and thinking. It is entirely appropriate, therefore that we should seek guidance from the philosophy of Gandhiji in general and the ideology of the founder of this movement Vinobaji in particular so far as the sheet-anchor of the movement is concerned, namely its principles. I believe that Vinobaji has erected a superstructure on the basic principles of Gandhiji

I am no close student of Gandhiji s teaching but have studied some of it recently in connection with my translation in Sanskrit verses of some of his thoughts in a book called

"Gandhi Sookti Muktavali" I should like to quote some of these thoughts as they seem to have a bearing on the ideology of the Gramdan movement.

Gandhiji says "Differences of opinion should never mean hostility If they did my wife and I should be sworn enemies of one another" Again "The highest honour that my friends can do me is to enforce in their own lives the programme that I stand for or to resist me to their utmost if they do not believe in it" These two quotations show what importance Gandhiji attached to free expression of opinion, no matter how high or low a person may be This indeed is the soul of democracy The second quotation shows how keenly Gandhiji valued active and responsible opposition.

Gandhiji also valued humility in forming one's views. He says "I am conscious of my own limitations. That consciousness is my only strength" and again "I wear the same corruptible flesh that the weakest of my fellow beings wears and am, therefore, as liable to err as any"

This humility was based on the infinite nature of truth and love, about which he says "Finite human being shall never know in its fullness Truth and Love which is in itself infinite" He adds "It is not given to man to know the whole truth. His duty lies in living up to the truth as he sees it, and in doing so to resort to the purest means, i.e. to non violence" and "Truth resides in every human heart, and one has to search for it there and to be guided by truth as one sees it. But no one has a right to coerce others to act according to his own view of truth" Thus the essence of his teaching should be the essence of all movements based on it. Humility and tolerance are the tributes which the finite pays to the Infinite and the only means of freeing one's fellow-beings should be persuasion. This does not exclude the democratic instrument of decisions by majority, but seems to leave to each individual the ultimate right of acting according to his own view of truth and if necessary suffer the consequence In the light of these principles, all talk of sanctions for the furtherance of the Gramdan movement appears to me to be completely mis-conceived. "Sanctions" can have no

place in the promoting of the principles of Gramdan and urge for sanctions can only tantamount to the confession of defeat on the path of persuasion.

The difficulty of carrying conviction to another is referred to by Gandhiji in the following quotation "Indeed what may appear to be an obvious error to one may appear to another as pure wisdom. He cannot help himself even if he is under a hallucination." This is how a large number of people do not readily accept what appears to be irrefutably proven to others in regard to the conduct of human affairs, and this explains why different systems of governing mankind have been evolved through the ages which reflect in their adherence views in regard to the best means of promoting human welfare.

In regard to service of others, Gandhiji had this to say "God demands nothing less than complete self surrender as the price for the only real freedom that is worth having And when a man thus loses himself he immediately finds himself in the service of all that lives " This must tally with the experience of all social workers in the just sense of the term namely that there must be no mental reserve and not an iota of self interest left, if the worker wishes to succeed in his mission. It follows that Gramdan workers must give up everything that they have and share in whatever scheme of redistribution is adopted if they wish to exercise influence over the minds of others possessing property Any reserve or holding back in this respect must defeat the very object of the propaganda carried on by the workers

Gandhiji attached great importance to compromise and was somewhat sceptical of pure logic. He says, All my life through, the very insistence on truth has taught me to appreciate the beauty of compromises", and again, "Human life is a series of compromises and it is not always easy to achieve in practice what one has found to be true in theory "

He combined what is deep insight and philosophy the realism which one seldom finds in philosophers and was prepared to go part of the way if he could not in confidence progress the whole way at one attempt but his compromise was not at the cost of principle and he took care to ensure his own

purity and to eschew hardness or arrogance or any other form of spiritual failings He says, "I claim that what I practise is capable of being practised by all, because I am a very ordinary mortal open to the same temptations and liable to the same weaknesses as the best among us Again and again he returns to the theme of man s inherent weaknesses, his liability to temptation and the supreme importance of practice agreeing with precept and the precept not being such as is incapable of being translated into practice by the ordinary mortal. All this, it seems to me, combines thoughts which are like sign posts to Gramdan workers. In any case, as I have stated before, Vinobaji has built on the basis of Gandhiji s principles and where there is any discussion in regard to fundamental importance of theory, I think that discussion can only be conclusive if it is carried out in the presence of Vinobaji although I consider that Shri Annasaheb Sahasrabuddhe the Secretary of the Sarvodaya Seva Sangh, has given a convincing exposition of both principles and practice which seem to me to bear the stamp of Vinobaji s teachings as I understand them

The subject for discussion is what must be done to make Gramdan universal. My own view is that Gramdan will never be universal in the world even if it becomes universal in India and that in any case, it can only be regarded as a goal as distant as the Pole Star to which the proverbial wagon is attached. This is due to the fact that human nature is imperfect although the nature of its imperfections will vary with the circumstances and the times, and it may be that in the dim distant future it will attain greater exaltation perhaps culminating even in super manhood as the philosopher and saint, Shri Aurobindo has held It follows, therefore that one should never take the view that the capacity of human nature to improve is limited and thus base one s policy on a static view of the imperfections of the human nature Even in the short period, experience has shown that the minds of human beings can be influenced for good far more than one is inclined to imagine, although they cannot be improved so fast or so extensively as we hope in our belief in man s inherent goodness. The real question

which can be considered practical is how the Gramdan movement is to be extended, expanded and established to the maximum possible extent and with the minimum loss of time.

Toward this objective, it seems to me very necessary that all workers in the Gramdan should surrender all they have to the common pool of Gramdan of which the Sarvodaya Seva Sangh is the keeper Secondly they must always practise Ahimsa, i e. persuasion only and should not think of using the States power except for the purely acceptable technical purpose of legislation. They should aim at unanimity as far as possible and must not use the majority to coerce the minority in any matter of substance. Thirdly all land within the Gramdan estate and all villages should be regarded as the common property of one family so to speak so that surpluses from one part of the country after legitimate needs are met, should be transferred in the form of produce or its cash equivalent for the benefit of backward and less advanced parts Fourthly since judgments of human nature are involved, no immutable targets should be fixed for the expansion of the Gramdan movement except on practical grounds This practical ground is that the appeal of the Gramdan movement will not be heeded unless current experience demonstrates that within its limited attempt, Gramdan is the means of sharing of advantages and elevating standards of living which is better than any other method presently adopted The expansion of the Gramdan movement will also be conditioned by the number of workers of the right type that can be secured who pledge themselves to the basic principles and are prepared to part with their all. Workers with competence in different fields will be required, but each one must have faith in the Gramdan movement, for otherwise people will back out even if they agreed to experiment with Gramdan or will refrain from joining.

This then is the central problem in human affairs how far will one man trust to the wisdom and influence of another and how far he will be prepared to surrender his property and judgment over the common property to representatives no matter how elected The irrevocability of any such surrender

is the chief obstacle to the expansion of Gramdan. As the complexity of human affairs increases in space and time, the circle of appropriate representation will also get bigger individual control will be more and more distant and more and more delayed and less and less certain and effective If judgment, wisdom and integrity in one's representatives were to be perfect, then Gramdan should be fully possible but such a view can only be held in respect of God i.e totalitarian is *possible in the case of God only But even God has given* every individual a lamp to light his own path and that is the voice of his conscience or as Gandhiji called it Inner Voice" Thus individual conscience is the basis of democracy But in human affairs totalitarianism means the concentration of power in a very small group the members of which are constantly engaged in liquidating one another It is for this reason that it becomes unacceptable to those who value individual freedom of judgment.

In any case, it is not possible to base plans on short term judgments. Economic standards have to be measured over long periods before one can establish trends with any degree of confidence. It follows that policy decisions and forms of governance will differ according to imperfect peculiar judgments and that man will go on wrangling through the centuries over the lessons of economic and social history

Even within a parliamentary democracy questions of judgments are constantly involved, but the rule has been accepted that decisions should be according to what is found to be or understood to be the general will and not the will of all. In other words, unanimous judgments are not necessary part of democracy and according to the importance of any subject various kinds of majority are prescribed for taking decisions in different representative bodies. *It is certainly always desirable* to have unanimous decisions if such decisions can be secured, but as the complexity of a representative organisation grows, such unanimous decisions will be rare in important matters and this is as it should be where free expression of opinion is permitted and even encouraged.

That is why within a parliamentary democracy we have all forms of economic organisation from un-compromising capitalism to extreme socialism. We have for the moment made a choice of our pattern of economic and social development by announcing that we shall be endeavouring to establish a socialistic or socialist pattern of society but even a judgment like this is apt to be reviewed from time to time according to the circumstances and according to the needs of the situation It looks as if for reasons which our Government considers sufficiently important, there is for the present going to be a retreat from the socialist pattern. One of these grounds may be that the judgment now is that greater production which is so very necessary for the fulfilment of our Five Year Plans, could best be secured by giving free rein to private incentive in organised industry and it is some such ground like this that must have, atleast on the part of certain Ministries influenced the abrupt liberalisation of import licenses for the private sector or the removal of heavy incidence of direct taxation at the highest slabs on personal incomes. Another consideration might have been the desirability of providing a favourable climate for the receipt of foreign investment, and indeed in this matter Government have already taken measures which discriminate in favour of the foreign investor at any rate This policy explains the pronouncements made both in the U S.A. and India, both by the Finance Minister and the Governor of the Reserve Bank in regard to the attitude of the Government of India to private enterprise as they interpret the amended resolution on Industrial policy

It has been stated that the development of our country's economy must not at any time go beyond the confines of parliamentary democracy no matter how slow the rate of progress is This is valid as far as it goes in general terms, but there is one factor which one must not overlook and that is that of the growth of population in relation to means of sustenance. Our population is now growing at a rate which will very likely double it within 35-40 years. It is obvious therefore that if we wish to elevate our standard of living, we must aim at an

annual rate of increase in our national income which will double it in a period significantly shorter than this period of 35-40 years We are aiming at an annual increase of 5% in the Second Five Year Plan but current indications are that the Plan is not likely to be fulfilled to more than three fourths and therefore that the rate of increment in the annual income is likely to be little under 4%. This means that instead of doubling the gross annual income in 15 years we shall be doubling it in 17 or 18 years and the period during which the per capita income will be doubled will be in conformity with it. I do not regard it as a matter for grave perturbation if this rate is maintained as that will leave us some little margin, although we shall make a poor show in the short run against countries like China who are carrying out their economic development under other forms of governance not acceptable to us. Our belief is that although in the beginning the rate may be slow the foundation of progress will have been firmly laid by encouraging free judgment by individuals on the right lines and through willing cooperation in the task of nation building.

The generality of our individual voter is poor because this is a poor country and 99% have annual family incomes below Rs 3 000/- But even in this matter there are variations which are significant, for instance there are differences among scheduled castes and consequent intolerance of one sub caste in relation to another There are also differences in the standards of education and the stage of awakening of different strata of our society Then the judgment in democratic matters has necessary to be by majority vote in our country which is apparently the method ruled out by the Gramdan ideology

Some disappointment has been expressed at the failure of the leaders, who agreed at the Yelwal Conference that Gramdan was a good thing to impose their views on their own party and to promote legislation facilitating the extension of the Gramdan movement. But it has to be remembered that in a democracy a leader does not necessarily impose his opinion on his followers in all circumstances To what extent he will

choose to do so and to what extent he will wait for opinion to be formed, are matters for his individual judgment If a leader feels that a matter is important enough and yet is unable to have his way in the party the best course for him is to resign his leadership but this is an individual view about which no rules can be laid down. It should also be remembered that the present Congress Party is a composite party and includes all kinds of people wedded to all kinds of economic ideology from extreme capitalism to extreme socialism. As regards Communist leaders, it is possible that they do not believe that the way of voluntary agreements will take things far although to the extent to which voluntary surrenders are secured the communists will possibly have no objection to the results of the Gramdan movement

In the light of what has been stated above, it appears to me that what has been expressed in favour of legislative sanctions to push Gramdan, such as prohibition of transfers is dangerously similar to Communist ideology It appears as if the young people in the Gramdan movement who talk of the revolutionary urge have forgotten the basic principle of Gandhiji, that it is not only the ends that matter but also the means adopted for achieving these ends and that wrong means have the effect of changing the very nature of the contemplated ends. Such thinking, I believe implies a faith in the unfailing wisdom and honesty of small groups of leaders, although history has proved that in nearly all such cases, the group turns out to be despotic or tyrannous or that a country is governed by a sort of perilously poised patriots who have sapped the foundation of free judgment and action

In conclusion, if the Gramdan movement is to prosper the worker should think in terms of (1) how to popularise it by precept, propaganda and practice (2) no quest of perfection on the part of the workers should be allowed to condemn or reject cooperation with other sectors of society with their imperfections or other forms of bringing about good under democratic methods On the other hand, use should be made of them while all endeavour is made to lead them forward to

the ideology of the Gramdan movement. It is for this reason that the decision taken by the Sarva Seva Sangh to accept whatever cooperation is proffered by Government agencies commends itself to me (3) every effort should be made to persuade the State Governments to study intensively the problem of regional disparities, and wherever State aid is available for the removal of such disparities it should be used for the furtherance of Gramdan, provided principles are not sacrificed as in the case of priorities, economy of funds proper training etc (4) the result of the movement should be constantly reviewed and appraised, and if there are any limitations they should be *realistically* accepted and (5) it is dangerous to use force in any form of organisation when faith is lost. Lost faith can only be restored by example and patient persuasion and not by non-cooperation or opposition.

7

CONFERENCE ON UNIVERSITY ADMINISTRATION*

I feel highly honoured and privileged by being called upon by the Ministry of Education and Scientific Research of the Central Government to inaugurate this Conference on University Administration. There are many reasons why I welcome this opportunity to participate in the Conference, and I hope that opportunity will be given to me also to be present at and perhaps take part in the proceedings subsequent to inauguration. I am extremely interested in this Conference personally as well as in my official capacity as Chairman of the University Grants Commission. In the first place I have been an administrator by profession and I have had an abiding interest in the theory and practice of public administration which interest was heightened by my membership of the Planning Commission. Even before my appointment as Chairman of the University Grants Commission, I had been taking special interest in university administration, and now that interest is deepened since there is intimate connection between the discharge by the Commission of the functions vested in it by law and the quality and efficiency of university administration.

The task of public administration is to carry out the national programmes of development, programmes which are based on the assessment of the needs and resources of the country and which represent a systematic effort to translate into action the goals of social and economic policy prescribed in the Directive Principles of the Constitution. What is true of the

*Inaugural Address delivered on 30th July 1957 at Delhi.

the ideology of the Gramdan movement. It is for this reason that the decision taken by the Sarva Seva Sangh to accept whatever cooperation is proffered by Government agencies commends itself to me (3) every effort should be made to persuade the State Governments to study intensively the problem of regional disparities, and wherever State aid is available for the removal of such disparities, it should be used for the furtherance of Gramdan, provided principles are not sacrificed, as in the case of priorities, economy of funds, proper training etc. (4) the result of the movement should be constantly reviewed and appraised, and if there are any limitations they should be realistically accepted and (5) it is dangerous to use force in any form of organisation when faith is lost. Lost faith can only be restored by example and patient persuasion and not by non-cooperation or opposition.

in connection with the improvement and strengthening of public administration are firstly problems relating to the achievement of a high degree of integrity efficiency and economy and secondly problems connected with the improvement of the machinery of general administration, particularly that concerned with the development programmes in the districts. But dominating over these problems is the influence of policy on the character of the administration. This involves the choice of goals, determination of priorities and the formulation of sound and feasible programmes having regard to the availability of resources in the shape of trained manpower The political executive of the country has to give special attention to the formulation of principles and policies in each field of national activity under a parliamentary democracy as well as to ensure that they are implemented by sustained effort in the public interest.

Devolution of power necessarily plays an increasingly important part in the implementation of complex programmes of action and one of the most important questions connected with administration is that of the devolution of power accompanied by the minimum safeguards necessary for its proper exercise.

It is likely that as the Second Five Year Plan proceeds, difficult issues will arise relating less to matters of policy and approach and more to questions of administration and organisation. If the administrative machinery both at the Centre and in the States, does its work with efficiency integrity and with a sense of urgency and concern for the community the success of the Second Plan would be fully assured Enumerating the administrative tasks before the country the Planning Commission draw attention to the indispensability of co ordination in policy and programmes in different sectors of the economy in terms of the objectives and targets set by the Plan. Among the tasks enumerated are the ensuring of integrity in administration, building of cadres and providing incentives and opportunities for creative service, devising speedy efficient and economic methods of work, providing for continuous

supervision and arranging for objective evaluation of methods and results at regular intervals.

Much that is postulated in regard to public administration will apply to the administrative work in the universities in its narrower sense and it might be of some interest to university authorities to have some idea of the survey of the machinery of public administration promoted by the Government of India in recent years ending with two Reports by Dr Paul H Appleby, formerly a Dean of the Graduate School at Syracuse University and before that an incumbent of many public assignments. As a matter of personal interest, I consider it worth-while to mention here that Dr Appleby's expert assistance was first sought in this matter at my instance and was made available through the courtesy of the Ford Foundation. His first Report was in fact transmitted to me in my capacity as Finance Minister Both his Reports are eminently readable and although there has been a great deal of controversy in regard to his conclusions and recommendations particularly those contained in the second Report, I should like to take this opportunity of stating that I agree in a great deal of what he says

My immediate purpose in mentioning Dr Appleby is to draw attention to two of his important recommendations in his first Report which were accepted and acted upon without delay by the Government of India. These were

(i) establishment of a special unit called the Organisation and Methods Division charged with the responsibility of making administrative studies and proposing improvements and

(ii) sponsoring by the Government of an Institution of Public Administration.

The Organisation and Methods Unit is in full working order and the Institute of Public Administration is well established and I would strongly advise the universities to take all possible advantage of these developments and to seek the assistance of these two new institutions for the continuous and systematic improvement of their administrative machinery Indeed this has already been done by some universities. I have

been informed that at the invitation of the Vice-Chancellor of the Jammu & Kashmir University the administrative system of that University has been studied and reported upon by the Organisation and Methods Unit. As regards the Institute of Public Administration, there is a provision for admission of corporate members and by a wise decision, the Institute authorities have decided to charge a special concession fee of Rs 50/ only to universities, research institutions and service organisations

Advantage has already been taken of this facility by some seven universities and colleges or other units within universities who have already been admitted as corporate members of the Institute. Among those, I am glad to notice the names of the Annamalai University University of Madras, Osmania University University of Rajputana, Nagpur University Utkal University and the Punjab University I very much hope that the other universities will without delay get themselves admitted as corporate members of the Institute of Public Administration and take full advantage of the work which is being developed there in regard to both the theory and practice of public administration

In the course of its relations with the various universities, the University Grants Commission has come to the conclusion that it will be worth the while for most of the universities to have a thorough examination made of their internal administrative machinery in order to secure despatch in the carrying out of development plans for which finance is available It is possible that the problems in this field in the case of universities are not of such a vast and baffling nature as in the case of the far flung and complex operations of State or Central Governments. There may not be reasons to fear that there are superfluous employees, and charges of prevalence of bribery and favouritism or the deterioration of efficiency may not have the same significance as in the case of Government agencies Nevertheless, I feel that no opportunity should be lost of streamlining the detailed administration of the offices maintained by the universities.

One of the difficulties experienced by the University Grants

Commission in its dealings with the universities is that information sought on various matters cannot be quickly obtained from the universities. There appears to be some bottle-neck in university administration which delays or hinders the collection of statistical and other information and despatch of the same to the University Grants Commission We have found also that reports on the utilisation of grants paid to the universities do not come in regularly and in some cases do not come at all The University Grants Commission office has a long list of cases in which in spite of reminders, satisfactory information has not been forthcoming. Sometimes this is due to the fact that grants are not in fact utilised as they should be but more often it is because of the inadequacies of the administrative machinery in the university concerned

We have found it almost impossible to prepare uptodate statements even on such matters as the number of students on the rolls of universities, the number of teachers, the number of persons who apply for admission to the various classes and the numbers admitted etc.

It would appear that none of our universities has a properly developed statistical department and that the records and accounts of universities are not maintained in a manner that would enable abstraction of required information quickly and effectively It would also appear that the information and public relations side of university administration needs development

In the context of university education however the word "Administration" has a far greater content and significance than in the case of Government s operations. Even in the case of the latter the efficiency or otherwise of the administrative machinery is in the ultimate analysis a function of the structure of the State itself and the division of the Constitutional responsibility *leading ultimately to accountability and answerability* of all organs of Government to the citizen. Structure determines in many ways the whole nature of the administrative process and has in operation much determining influence on general policy Structure determines where responsibility lies, how and to what extent responsible and controllable delegation

takes place, what emphasis should be given to various objectives and how progressive responsibility for decision-making should be distributed.

The prevailing structure of public administration in India in the above sense is one of coordination rather than administration as Dr Appleby has pointed out, which provides for no continuous line of responsibility for administrative action as between the States and the Centre

In a sense, the same dichotomy characterises the constitution and control of universities and it is particularly noticeable in the field of university finance In the university world, in line with experience elsewhere except for a few of the oldest universities, while the main financial assistance or the significant portion of it comes from the State for current expenditure, for development it is derived from the Centre and implementation of programmes and executive action is almost overwhelmingly with autonomous university authorities This is one reason why administration is so uniquely important in the case of universities. From the point of view of the States or the Centre, grants-in-aid are often accompanied by conditions to be fulfilled. They are apt to become customary and continuing and not increasing steadily and largely in amount.

The University Education Commission of 1948-49 in Chapter 13 of its Report deals appropriately therefore, not with university administration as with constitution and control. They had noticed that there were universities then whose administration was unsatisfactory, even in purely academic matters, such as appointment of examiners and awarding of degrees the procedures and standards in this respect being suspect in this case. They recognised the damage that was caused by this state of affairs and proceeded to outline the kind of constitution for a university which offered scope for achieving and maintaining the necessary improvement. Dealing with the limits of controls, they proclaimed their belief that more control from outside was no way to achieve reform in university education and went on to say that on the contrary a great many of the evils then noticed arose from the fact that most of the universities had no real autonomy whatever and had

proved incapable of resisting pressure from outside. They held that the universities should be sensitive to enlightened public opinion they should never let themselves be bullied or bribed into actions that they know to be educationally unsound or worse still, motivated by nepotism, faction and corruption. They asserted that the right public policy was to give a university the best possible constitution securing among other things, the inclusion of wisely chosen external members on its governing body and then to leave it free from interference

Almost a decade has elapsed since the University Education Commission submitted its Report in August 1949 and the Constitution of India promulgated in beginning of 1950 embodies many of the recommendations made by the Commission in regard to the relation of universities with State and Central Governments. While in List I of the Seventh Schedule i.e. Union List co-ordination and determination of standards in institutions for higher education or research and scientific and technical institutions is the responsibility of the Union Government, in addition to the whole responsibility for what is known as the Central Universities as well as Institutions for Scientific and Technical Education declared by the Parliament by law to be institutions of national importance and financed by the Government of India wholly or in part, the responsibility for education including university education subject to the aforesaid provisions of List I, was vested in State Governments. Indeed, it was in exercise of the legislative powers vested in the Union under entry 63 and 66 of List I of the Seventh Schedule that the University Grants Commission Act was passed by the Central Legislature and has vested in the University Grants Commission various powers and functions for the promotion and co-ordination of university education and for the determination and maintenance of standards of teaching, examination and research in universities. Funds have been placed at the disposal of the University Grants Commission or have been allotted under the Plan for the purpose of enabling the Commission to discharge these functions. The question of administration of universities in its broader sense is therefore one of supreme interest to the University Grants Commission.

It is for this reason that the Commission has ordered a thorough examination of the constitutions of the various universities to be made with a view firstly to finding out how far they deviate from the several recommendations made in this behalf by the University Education Commission and secondly, to determining by fresh review and consideration how far such deviations are found to be appropriate in the present circumstances and how far in the light of experience gained so far modifications seem to be called for

We are aware of some instances of administrative break down in universities because of conflict between the various "authorities" of the university and because of lack of co-operation amongst the university bodies and university staff. Sometimes the situation becomes so bad that even students are involved and the academic and moral standards of the university suffer grievously It is difficult to put one a finger exactly on the cause of such a situation. It certainly has something to do with the character and attitudes of university men and women. But it may also be due to defects in the organization of the university and the excessive fragmentation of authority As stated earlier the University Grants Commission is having an analysis prepared of the Acts of incorporation of all our universities to see in what respects they differ from the model recommended by the Radhakrishnan Commission and to discover if these variations have any connection with any problems of discipline or efficiency that may have been experienced in some of the universities But even on a superficial observation of the situation there appears to be sufficient ground for suspecting that the difficulties in a number of universities might be due to factors such as these

(a) the Vice Chancellor does not have adequate powers
(b) the University Councils are too large and are constituted on representative principles which involve electioneering and encourage party politics
(c) the Vice-Chancellor is appointed by the Chancellor on his own initiative and does not enjoy the confidence of the members of the university
(d) the Vice-Chancellor s tenure of office is too brief

(e) there are too many external members in the Syndicate (or Executive Council) and Senate (or Court) of the university

The co-relation between any particular element in a University Act and any problem of administration in the university is difficult to establish but where a particular factor has been known to be a cause of trouble, it would obviously seem desirable to remove or modify that factor

In this connection, it is I think, worth-while casting a glance at the contemporary scene in the university world outside India, particularly Britain As regards the framework of government i e. in the matter of organisation and administration, British universities have features which are somewhat unique. *In the U S A. the University President and a Board* of Trustees usually constitute the governing body they rely only to a limited degree upon faculty recommendation and representation. At the other extreme are most of the universities in other countries, which are dependent upon central ministries of *education i e.* they are a part *of the national* education system. In Britain, the university system has and is formed by democratic practices perhaps to a much larger extent than anywhere else

In the older universities of Britain, such as Cambridge and Oxford, the government consists of three bodies which reflect their origin in name and function (1) The Senate at Cambridge or the Convocation at Oxford (2) The House of Regents at Cambridge or the Congregation at Oxford (3) The Council of the Senate at Cambridge or the Hebdomadal Council at Oxford. Essentially the forms of organisation of the two Universities are the same except that at Cambridge the greater power of the professoriate somewhat lessens the power of the Council of the Senate in favour of what is called the General Board of Faculties. Cambridge and Oxford have no local connection, comparable to the modern universities. They are national, indeed international institutions, and are faced with the problem of keeping in touch with a widely scattered constituency There is a system in vogue of outside

representation upon the Appointments Board and the Extra Mural Delegacy which shows that when necessary a method can be evolved for cooperation with the outside world. 'Apart from this the only means whereby general outside opinion has been able to influence the working of these ancient universities have been periodical Royal Commissions, appointed on the request of the universities themselves.

The Chancellorship at both the Universities is honorary and the position is occupied by a distinguished national figure elected by the combined vote of faculty members and recognised alumni. The chief executive is the Vice-Chancellor A member or head of one of the constituent colleges, is nominated by the Chancellor or elected by the head of the colleges The Vice-Chancellor holds his office usually for three years and is not re-elected at Oxford, while at Cambridge the Vice-Chancellor is elected for a two-year term from two candidates nominated by the Council of the Senate. At neither institution is the Vice-Chancellor given power to intervene directly in the affairs of the university save through his "speakership in Council and his membership on committees. He tends to be an instrument of administration, rather than an instigator of it but his executive functions, it is held by competent observes, are none the less enfeebled thereby

In response to organisational and administrative structure, all colleges are an inseparable part of the university to which they belong, but each one has its own property, its own government, and its own organisation and administration. Degrees are awarded by the university but the student is "sent down" only by the college. The supervision of a student's individual work falls within the jurisdiction of the college, but the course of study and the arrangement of lectures laboratory work and examinations are the responsibility of the university Although colleges are obliged to pay taxes to the university they may not receive grants directly from the Government. All colleges have their private libraries but the university maintains the central library and the principal museums laboratories, administrative offices, gardens and other properties acquired in its name.

The newer universities in Britain are subject to a dual, lay and academic, control through a Court of Governors, a Council, and an Academic Senate The Court of Governors consists of representative graduates of the university and other important individuals who have a special interest in university policy The Council is the practical governing agency made up of the administrative heads of the university members of the faculty nominated by the Academic Senate, lay representatives appointed by the Court of Governors and members at large. Chosen by the Court of Governors, the Council functions in a somewhat similar fashion to an American Board of Trustees The Senate, composed entirely of faculty members, is concerned chiefly with academic affairs It also advises the Council. Faculty Boards, which are exclusively internal bodies handle a mass of academic detail and assist in directing the corporate life of the university Thus while the system of the government at the old universities might be termed 'direct democracy at the newer universities, it has been called a combination of an oligarchy and a represetative democracy

Certain unique features characterise Scottish university organisation which it is not necessary to enumerate here. There is however one feature which deserves a mention and that is the Rector which appointment preserves one of the most ancient traditions of university government. The Rector is elected every three years by the matriculated students. The post is regarded as a very high honour elections are often keenly contested, and the most distinguished statesmen and men of letters are proud to be nominated. It is part of the Rector s duty to watch over the interest of the student body

On the Governing Council of the modern universities, there is a wide representation of community interests, including members of the local educational authorities, who work with the national Ministry of Education on behalf of the lower schools. The judgment pronounced with some authority in this connection is that the structure is weighted with lay representation and that the new universities tend to grant little voice to academic members in matters of administration, the

extent and continuity of which is assured chiefly by a quasi permanent Vice-Chancellor

Since Vice-Chancellors are not chosen especially for their administrative competence or money raising ability but because of their demonstrated leadership among men of their own profession they have to spend a great deal of time learning administrative duties while in office. Although, as stated above at Cambridge and Oxford the term of office of the Vice-Chancellor is brief it is felt that short appointments are perilous from many points of view since incumbents are unable to win administrative bodies to the support of long-term policies. It is recognised, however that there is some value in restricting any tenure which would tempt one man to accumulate arbitrary power A solution has been suggested in the establishment of a dual leadership whereby the Vice-Chancellor would handle major matters of policy and a President or Principal would handle day to day administration on a long term or even permanent basis.

The relation of the teaching staff to the university administration is more intimate at Oxford and Cambridge than in the civic universities of Britain. The administrative bodies of the teaching staff namely Congregation at Oxford and House of Regents at Cambridge actually elect the Governing Councils. At Cambridge all alumni and faculty members may legally participate in administration At both Universities the administrators are members of, and are responsible to the entire teaching body In theory at least, no system could be founded more on the rights and dignity of the teacher but it is acknowledged that the consequent diffusion of power and responsibility tends to restrain action On the other hand the advantage is that measures once adopted are likely to be of more significance and more permanence Whether this by itself is a desirable feature is a matter for consideration in view of the necessity for rapid decisions in response to the forces of national development. These forces may well demand an administrative structure better suited to carry such decisions out. An intermediate position has been adopted in the University of London, where the administration of finances is

strongly influenced by the University Senate which controls educational policies The Court is the supreme financial authority but the Senate has dominant representation. The functions of these two bodies are mutually exclusive, but their overlapping membership helps to wed the instructional end of university practice with the means of carrying it on.

There is considerable disagreement among British university leaders as to what shall constitute the ideal pattern of organisation and administration, and there is a wide spectrum of opinion" This diversity of opinion is of course related to the conception of the fundamental aims and practices of university i.e all university practices are a reflection of the university's collective philosophy of education Therefore, in Britain, as elsewhere, much of the controversy on educational administration is hardly more than extension of the general argument on the purpose of a university

Perhaps the most vital issue originates in the theory of the separation of the university and the society George F Kneller on whose book on Higher Learning in Britain I have drawn extensively points out that the late Professor Laski held that the older universities were too oblivious of their social responsibilities Admitting that the larger issues of policy should arise out of recommendations of the members of the teaching staff, Laski wanted greater lay participation in both legislation and administrative control and advocated the representation of all segments of society on the governing bodies of universities. But even among dignatories of the civic universities of Britain there is a difference of opinion in regard to the desirability of lay representation While one would go so far as to assert that lay representation is endemic to the very existence of the civic universities because the policy of university administration must be in keeping with the nation's needs, others equally distinguished are convinced that lay representation usurps the proper prerogatives of the university It is worth while here to remind ourselves that the latter body of opinion has immediate relation to the establishment and administration of what are called 'redbrick universities in Great Britain dating from an age when British cities boasted

of their prosperity rather than of their bomb damage National needs and requirements in India have naturally other dimensions and economic and social urgencies than in the cities of Britain. In such a context, some democratic representation will probably be a source of strength to a university so long as a clearly defined distinction is drawn between what is a proper subject matter for discussion in open sessions, what is considered policy and what is judged to be operational detail and what is to be kept confidential. It would seem desirable therefore, to bend every effort towards enhancing the utility of the lay representation so as to strengthen its potentiality to serve the university and the nation through the university As Sir Frederick Ogilvie has pointed out, the dual system of administration in modern universities has its moments of friction but it at least ensures that the educational essentials are the responsibility of the academic staff alone. It can enlist administrative experts who know their business and can save the professors' time and energy for theirs.

Kneller draws attention to what he considers to be two serious defects in the organisation and administration of modern universities. One is that the majority of faculty members below the grade of professor have no legal avenue of direct participation in university government and thus derive only an imperfect knowledge of what transpires and can little influence what is discussed in the deliberative organs of the university The other is that the lay representatives may be unsuited to the task of supervising higher learning also that they are too often subject to pressures of non academic nature The second defect implies the tendency of community control to vitiate the strength of pure scholarship and traditional university teaching by a natural but overzealous desire to satisfy community needs. The university is then called to service *not for the more sublime and enduring ends of learning*, but for tasks more appropriate perhaps, to a technical or training college It is also felt by competent observers that the concentration of power in the hands of laymen, administrators, and senior academic personnel blocks efforts to promote corporate life among students and teachers Unless imbued with the

passion for the education of persons administrators prefer to concentrate on the more visible and tangible elements of university growth The dangers to be guarded against are inhibited corporate growth administrative isolation over specialized procedures inadequate faculty representation and excessive lay control. All these matters need careful examination in the light of modern environment and the needs of a *modern state and on their satisfactory solution will depend* satisfactory implementation of plans for university growth.

The Agenda already includes items directly bearing on constitution or structure such as the Vice-Chancellor's office or constitution of university bodies. There is no item specifically concerning the continuous review and improvement of the ad ministrative machinery in the narrower sense but I hope I have given sufficient reasons for justifying some little discussion of this problem. I have also made recommendations which I hope will have at least the effect of provoking an exploratory discussion on the item. Problems relating to the teachers and the students of the universities are also included in the Agenda together with the all pervading and therefore all-important problem of university finance and I wish to make a few obser vations in regard to some important aspects of those problems. But before I do so I should like to say that I welcome the inclusion in the Agenda of the item Relation between Univer sities and School Boards since it draws attention to a vital matter pertaining to the integration of the educational system and the nature of the raw material for whose benefit university education is imparted

In my opinion the central problem affecting the terms and conditions of service of the teachers and the contentment, degree of application and peace of mind of the students of the universities is that of finance finance considered in relation to the determination if such determination is possible, of the numbers for whose benefit university education is to be arranged At the outset it is worth-while reminding ourselves of some relative facts and figures for obtaining a proper per spective to the discussion.

As far as I am aware there are very few countries in

which the citizen is held to be entitled to university education as a matter of right. In most countries the State considers that it has fully discharged its duties towards the young citizen when it has arranged for the completion of the upper secondary stage of his education, and in the more advanced countries the age at which the young citizen leaves school is about 18 I am convinced for reasons into which it is not necessary to enter here, that all educational reforms in this country should be designed so as to raise the average age of our young persons leaving their secondary stage of education to above 18 This will have the advantage of giving a firmer and stronger found ation for his preparation as a citizen and will diminish very considerably the gravity of the problem of educated unemployment, in that the prospective employer will have greater confidence in the modicum of education and mental and temper mental maturity of his young employee and will not insist on the possession of a degree by him. According to our Constitution, education is to be free and compulsory in course of time for children up to the age of 14 I have no doubt that in the long run this age will gradually be raised to 17 as the improvement of our financial resources permit. But I foresee no time at which it will be possible for the country to undertake the responsibility of free university education

It was suggested recently in the Lok Sabha that as in China India should undertake to give free university education to its people, but I believe that this suggestion proceeds from an imperfect appreciation of the facts of the situation in China In the first place the Chinese economy is completely controlled and planned by the Government, and only that number of young persons is taken into the universities which is required for various estimated national purposes. In terms by 1961 or 1962, China expects to provide for some 850 000 students in her institutions of higher learning including professional and technological institutions. This number should be compared to our present number at the universities which cannot be less than 800 000 It should be remembered at the same time that whereas China has a population of 600 million, ours is still short of 400 million and that the size of the Chinese Five Year

Plan is certainly twice that of ours. In this context, I cannot refrain from referring to some of the basic relative factors of the Chinese and our own economies. It would not be outrageously wrong to assume that the total national income of China is twice as high as ours It is probable that national income from agriculture is about half the total as in our case The total cultivated area in China is about the same as in India i e 250 million acres in round figures, but the production per acre is at least twice as high as ours. What is more important from the point of view of the pace of development is that currently about 12 per cent of the gross agricultural produce is taken by the Government of China as revenue for development and investment as against hardly 3 per cent in the case of India. These figures mean that China is in a position to invest at least 8 times the sum that we are able to invest directly out of our agricultural national income for the purpose of economic development. If we assume that to us Rs. 150 crores a year is available for such investment, in China the figure therefore must be of the order of the equivalent of Rs. 1,200 crores These figures explain the mystery of how China is able to sustain a much larger and faster rate of economic development than ours without unduly depressing the living standard of her people. These figures only illustrate the basic truth that the poorest are least able to save anything out of their current consumption for investment. As has been pointed out by all sorts of authorities therefore unless all possible attention and effort is diverted to detailed organisation of the productive machinery in our country particularly in agriculture, there is no hope of our being able to pursue with any degree of success our plans for development in any field of national endeavour and that is certainly true of university education

A Preparatory Conference of Representatives of Universities held at Utrecht by the UNESCO in August 1948 brought out the chronic controversy in regard to the fundamental question What is the role of the university? At one extreme were those who believed that the function of the university was the training of an 'elite by an elite at the other were those who believed that universities should serve all young people

who could benefit from some kind of higher education after leaving school. The United States, and to a somewhat lesser degree the British Dominions represented the latter point of view France, and to a varying degree other European countries represented the former The East and the Middle East, still in the early stages of university development, it was thought, then had not yet had to face this issue. I am afraid the issue is staring us in the face today and we have to make up our minds in regard to which ideology we shall adopt. Having regard to the fact that we shall be endeavouring to strain to the utmost limit our total resources in an all-out effort to develop the national economy and that there will be no slacks left or decorative fringes or border embroideries, I have no doubt myself that we shall have to restrict university education by and large to the number of university educated men and women that the country will be needing from time to time and that as regards the rest, the nation will have done its duty by expanding and extending as well as diversifying secondary education, especially of a technical character It is only then that the States and the Centre will be able to sustain adequately the expanding net work of universities. It is then alone that firm and dependable arrangements can be made for adequate financing of university education.

In order to get some idea of the dimensions of the problem, it is worth-while giving at this stage two sets of figures one indicating the ratio of young persons at university to the total population and the other expenditure per head by public authorities on these young persons. At one end of the scale is a country like U S.A. where per million of population the number of young persons at the university is over 15 000 and at the other are countries like U K. and India where the number is approximately 2,000 In between is a country like USSR where the figure is probably 8 000 per million of population As regards the expenditure in U.S.A. and U K it appears to be equivalent to Rs. 5 000/ per student whereas in India it is less than Rs. 500/ per student on an average. From these figures also it will become clear that from the purely finance angle it will be as much as we could do to arrange for

higher education on any acceptable standard of only as many young people as are likely to be required for the purposes of national development conceived in the broadest sense Assuming that we were to choose such a course of action, there is a great deal to be said in favour of the fiscal machinery provided by the Constitution, particularly the periodical finance commissions being utilized to ensure that the State Governments are enabled to place at the disposal of their universities adequate finance for running them as well as for matching any development grants that the Centre might make on a contributory basis. In considering this aspect of the question it is necessary to remember that in no country in the world has it been found possible to run universities entirely on the income derived from the fees charged to the students. Indeed the tendency is in the opposite direction, and I believe it is a fact that in the United Kingdom at least 80% of the total expenditure of universities is found from endowment and grant in-aid from Government and other public authorities. This trend will be rendered all the stronger if the basic choice made in this country is as indicated above namely to select for university education only those who are needed for the purpose of national development. In practice it would mean a very substantial expansion of the system of scholarships and freeships, not to speak of concessions in regard to board and lodgings This however is for the present only an ideal to be aimed at awaiting the strengthening of the country s financial resources. In the meantime, especially when no significant or effective action is taken to check the pressure of numbers and vital reforms such as the enhancement of the emoluments of teachers in the affiliated colleges are held up for lack of funds, it seems very necessary to review the question of charging adequate fees for tuition as well as adequate expenses for other matters such as board and lodgings. At any rate there is a very strong case for rationalizing the fees structure so that there is no glaring disparity and inequalities as between university and university for it may be safely taken for granted that the economic condition in most parts of the country is much the same and that the national income in one State is not markedly

higher than in another State. I hope that the Conference will give attention to some of these fundamental issues that I have raised.

In conclusion I should like to observe that there is an attempt to read too much in the terms 'democracy and 'autonomy' as applied to universities. I hope I have made it abundantly clear that no subordinate authority or no creature of the legislation such as a university can claim unhampered democracy or autonomy in the sense bordering on sovereignty as against the people of the country that is to say the citizen who pays for the university and has a set of purposes which he expects the university to fulfil. The essence of democracy in a constitutional sense is a chain of representation and responsibility stretching from the citizens to the organ of administration, plus as much lime light for the deliberations of policy and the review of the operations of government as is prudent in the prevailing circumstances. These conditions do not exist and cannot in their nature exist in the case of universities, and the ultimate control of the citizen on a university together with all its implications must continue

Public Administration is policy making and policy-making is politics. As an eminent expert on public administration has observed in a volume entitled Policy and Administration "If admission that this is true seems to exalt administration, it must be seen that the emphasis on politics subordinates the administrator exalts the politicians, and thereby exalts the citizen. Public administration is policy-making. But it is not autonomous exclusive or isolated policy-making. It is policy-making on a field where mighty forces contend forces engendered in and by the society It is policy making subject to still other and various policy makers Public administration is one of a number of basic political processes by which the people achieve and control governance "

There is, however an important caveat to be entered here and that is that the politics governing university affairs must not be of the wrong type. That is, it must not be the invasion of university affairs by political or other cliques by the

open-door of democratic election or by political nomination with the object of furthering the private ends of a party or a clique, for an exclusive control over privilege, patronage and power and not for any identifiable ends of promoting the welfare of the nation.

8

MODERN PLANT PHYSIOLOGY*

THERE is an element of poetic justice in my being called upon to inaugurate a Scientific Seminar particularly one concerning a division of Botany the importance of which is steadily growing I am what may be regarded a run-away from Science since I took the Honours Degree in Natural Sciences including Botany, in Cambridge, only to step into other careers unconnected with Science in general or Botany in particular Nevertheless, I am glad that although not as a professional scientist or physiologist, but as one who is interested in the general advancement of research in all subjects in all Indian universities in my capacity as Chairman of the University Grants Commission, I have the opportunity of inaugurating this Seminar

When I studied Botany at Cambridge forty years ago at the feet of A. C. Seward F F Blackman F T Brooks and others, all of whom have now passed away Plant Physiology as a separate branch of Botany was perhaps half a century old Its beginning can be traced to Julius Sachs who distinguished himself by correlating the then known facts of photosynthesis. I believe, it would not be unjust to say that the study of Plant Physiology was developed in this country by men who were not very much senior to me or were my contemporaries at Cambridge, such as Inamdar and Parija, the latter of whom I am very glad to see is here with us and will be presiding over the after noon session concerned with Growth and Metabolism. These pioneers in Plant Physiology started their research careers with studies in the functional aspects of plants, and during the

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Inaugural Address delivered at the Seminar on Modern Developments in Plant Physiology held at Delhi on 26th August, 1957

last forty years or so the subject has progressed very considerably

Modern Plant Physiology can justly be called a synthesis of subjects dealing with the behaviour of the plant organism, touching the borders of Embryology and Bio-Chemistry and including parts of Biology Chemistry and even Physics and Statistics. It has thus become a region rather than a single branch of Science and its inclusive nature now demands a broader background of knowledge than many other sciences. It is this, I think, which makes it so interesting and stimulating, and perhaps so tantalising, when it comes to the solution, in conjunction with Bio-Chemistry of really fundamental problems dealing with the living organism. It looks as if biologists, biochemists and plant physiologists are today hotly on the trail of life itself. Only the other day the press carried a statement said to have been made by Oparin, member of the Soviet Science Academy that he believed that life could be created artificially under laboratory conditions provided scientists from many nations work towards this goal. He expressed his hope that some headway would be made in this direction during the international conference on the 'Origin of Life which was scheduled to open at Moscow on the 19th of August last. Apparently Soviet scientists have met with numerous difficulties, particularly in their attempts to transform matter but they claim to have achieved transformations similar to those occurring in living beings

Certainly much food for thought is furnished by the contemplation of contemporary phenomenon of man on the one hand being in possession of scientific knowledge which if mishandled or put to wrong uses, could almost certainly destroy life on earth, and on the other hand being almost on the verge of probing the mystery of life so successfully as to be led to hope that man can make life.

Leaving these fundamental aspects aside, there are now pressing practical problems before the world which must make growing and urgent demands on all the sciences for applications which will help in sustaining life on this globe I refer to the growth of human population at rates which do not seem to be

capable of being easily controlled in many parts of the world and of the consequent urgent necessity of producing larger and still larger quantities of food from the land and water resources at the command of man.

Taking India for instance, unless some radical slowing down of the annual rate of growth occurs, the population will almost certainly more than double itself in 30 or 35 years while the extent to which the limited land resources can be brought into utilization for the production of food for man will probably be proportionately inadequate, not to speak of the unchallenged claims of cattle of all sorts. To us in India, there fore, the application of sciences like Plant Physiology for the production of more food is of vital importance

Success in controlling the activities of living plants and in making them produce more and still more cannot be achieved without a clear understanding of the processes which occur in them and of the effects of environmental conditions upon these processes. Forester, fruit grower cotton planter floriculturist, grain farmer or any other cultivator of plants, all need the assistance in application of the principles of Plant Physiology together with the related sciences for the solution of this funda mental problem of producing more and ever more. In the past such assistance has already been furnished by the application of the investigations of plant physiologists in such fields as the proper use of water and fertilizers, correction of deficiency diseases, soil management, introduction of soilless culture, seed testing breaking the dormancy of seeds and tubers canning and storage of agricultural produce, applications which can be traced to fundamental investigations of the plant physiologists In recent years, a new chapter has been opened in the form of the application of hormones, a field in which our distinguished visitor Professor K. V Thimann of Harvard University has added materially to our current knowledge of the subject.

It is therefore, a matter of pleasure that a Seminar on so important a subject has been organised on an All India basis and perhaps for the first time in the botanical history of the country It is most appropriate that with the two important centres of research like the Indian Agricultural Research Insti-

tute and the University, Delhi has been chosen as the venue for these discussions and consultations It is also fortunate that the Seminar is being held under the guidance of Professor Thimann, who is one of the most distinguished physiologists of the world at the present time.

The beginnings of physiological research in India are linked up firstly with attempts to determine the mineral requirements of crops in terms of Nitrogen, Phosphorus and Potassium fertilizers and secondly with the visits of men like Inamdar Parija and Ranjan to F F Blackman s Laboratory at Cambridge which led to the establishment of schools of research devoted to the study of plant metabolism, especially respiration, followed by enthusiasm for studies in photoperiodism, vernalization and drought resistance. It is only during the last decade that there are indications of active interest being taken in tracer elements radioactive tracers, physiology of pollen and the use of hormones in various aspects of horticulture. More recently still, some laboratories in India have for the first time, begun work on organ and tissue culture so that it has been necessary, I see to set aside one Session of the Seminar for reading and discussion of selected papers on the subject.

Meanwhile problems of a more fundamental nature have attracted notice in Europe and America. The use of tracer elements has for the first time given us a probe into that master chemical reaction which was so simply expressed in the last century as $6CO_2+6H_2O=C_6H_{12}O_6+6O_2$ Now a great deal more stands discovered about the intermediaries of photosynthesis and it is hoped that instead of obtaining merely soda water from a combination of these two simple substances (carbon dioxide and water) synthetic food in the laboratory may be prepared in the years to come Physicists chemists and biologists all seem to be engaged in a detailed study of this photoreduction of carbon dioxide Science being truly international the actors in the arena come from different areas of the world, one advance being made at this place and one at that. Later still, another person takes up the thread and begins afresh in a novel way of special mention here being Chromatography

Radio-Chemistry Micro-Chemistry and perhaps other brand new techniques of which I have not read or heard

During recent years several Indian scholars have gone abroad to acquire first hand knowledge of these more modern aspects of plant physiology and I have no doubt that they are making or trying to make valuable contributions on these lines. All told, however, Indian work on Plant Physiology has in the judgment of those competent to judge, seriously lagged behind certain other branches like Morphology Taxonomy Genetics and Plant Pathology Morphology and Taxonomy have flourished perhaps because they require comparatively simple equipment which is all that our colleges and universities have so far been able* to afford. Genetics and Plant Pathology have received reasonable support at the hands of the various agricultural departments and I dare say we have made a fair amount of progress in both. Even with the short and limited experience of Botany I had many years ago at Cambridge I am conscious that Physiology needs facilities of a special nature which it has so far not been possible to provide to the universities in this country Nothing to say of a phytotron, such as the one built up at the California Institute of Technology at a cost of $ 500 000 our laboratories lack even a few small rooms and glasshouses with control of temperature and humidity Further even when a professor is able to invest money in a particular apparatus it has not always been possible to maintain it in good condition because of the serious dearth of technical personnel who could repair it before the malady becomes incurable. The University Grants Commission whose function it is to look after the needs of the universities, will certainly look forward to the suggestions which this assembly may be in a position to give in this regard after due consideration of local conditions and the resources of the country

Ladies and gentlemen, I am not a specialist but it has been my privilege to be with specialists this morning. I now wish to leave the field to you, and wish you all success in your deliberations. I hope that they will be fruitful and productive and inspire many younger people into the spirit of adventure and of enthusiastic but critical inquiry You have my sincere good wishes in the fullest measure,

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INDIA WHEAT LOAN EDUCATIONAL EXCHANGE PROGRAMME*

I am grateful to the Ministry of Education and Scientific Research for the opportunity that has been given to me to participate in the warm welcome that we all extend to the distinguished educationists—specialists in general education sounds so fascinating—who have arrived in India under the auspices of the India Wheat Loan Educational Exchange Programme as consultant to universities who are ready to introduce General Education Courses. I should like also to take this opportunity of paying sincere tribute to the judicious and effective work of the India Wheat Loan Directors and their Associates. That the Programme has stemmed from Wheat Loan of 1950-51 in the securing of which I played some little part in my then capacity as Finance Minister to the Central Government, adds an additional flavour and edge to my feeling of satisfaction. The India Wheat Loan Programmes are arranged in consultation with the University Grants Commission in a spirit of the utmost cordiality and understanding. This is an additional reason why I am glad to be here this morning to be able to address our distinguished guests very briefly on the topic of the working of the University Grants Commission and its relations with the Indian universities.

A system of State grants and Federal grants to universities obtains in the United States of America and in the United Kingdom, the universities receive grants from the unitary Government of that country through the University Grants

*Address delivered on 9th September 1957 at Delhi.

Committee. In India, the first University Grants Committee was formed in 1945 to deal solely with the "Central Universities" i.e. Universities for which the Government of India are directly responsible. But within the next two years, the Committee was empowered to deal with both State and Central Universities. The Committee had no funds placed at its disposal by the Government and was only able to make recommendations to the Education Ministry which in turn transmitted them to the Finance Ministry. These disabilities greatly impeded the realisation of the objects for which the Committee was set up and it was this situation which was the subject of an important recommendation by the University Education Commission, which submitted its Report in August 1949. According to the Commission, establishment of a Commission to allocate both recurring and non-recurring grants from the Centre was so fundamental to their purpose for developing Indian universities that they held that if it were not in existence they should have to invent such a machinery. As some sort of a Committee was in existence, they contented themselves with recommending several changes in the powers, duties and membership of the Committee in order to make it an effective instrument for developing higher education in the country. It is out of these recommendations that the present University Grants Commission has been born. In its original form, the Commission was set up by the executive order of the Ministry of Education of the Government of India, but in March 1956 the University Grants Commission Act was passed, which was brought into force from November 5, 1956; and it is in accordance with this Act that the University Grants Commission is operating.

The University Education Commission were particular in pointing out the great importance of good relationship between the universities and the University Grants Commission. This relationship was according to them, to be one of friendship and not of the policeman or even an inspector. To this end they laid down a rule of conduct that the initiative in seeking advice of the University Grants Commission should always come from the universities. They were very anxious to ensure

that the scrutiny of the proposals for development of universities was carried out without impairing the academic autonomy of universities and hoped that the universities in their turn would recognise that if instead of discharging their responsibilities, they diverted their energies to internal factions, there would be the danger of the University Grants Commission diverting the public money with which it is entrusted into more profitable channels When the University Education Commission made their recommendations the Constitution of India had not been promulgated. This was done early in 1950 and according to the legislative lists in the Constitution, while the responsibility for supporting and maintaining universities, apart from the Central universities vests in the States, the responsibility for the co-ordination and determination of standards in all universities vests in the Centre It is, from the legislative and constitutional point of view in exercise of this latter power that the Central Legislature passed the University Grants Commission Act of 1956 to make provision for the co-ordination and determination of standards and provided for certain specific functions to be discharged by the University Grants Commission, such as the promotion and co-ordination of University Education and determination and maintenance of standards of teaching, examination and research in the universities in consultation with the universities themselves or other bodies concerned, maintenance and development of the Central universities development of other universities and advice to states in the establishment of new universities.

Even in 1949 i.e when the University Education Commission made their recommendations, the financial position of most of the universities was far from satisfactory The Commission found that in most cases the universities were working on deficit budgets and in all cases, the revenue from different sources was hardly sufficient to meet the average modern needs of the universities and that in no case were sufficient funds available either for expansion or for improvement in the many directions needed The total number of students attending colleges and universities was at that time 250,000 and the expenditure per student per year on the maintenance and

development of the Universities on an average was Rs 400/ On the basis of these figures, the Commission recommended that an additional sum of Rs. 10 crores (a crore I may say for convenience of rapid if somewhat inexact calculation is equal to 2 million U.S A dollars) would have to be contributed annually for a period of 15 years between them by the Central and State Governments for the development of university education. With the help of this additional contribution the Commission held that teachers salaries in the then universities could be raised substantially that Rs 40/- per student could be urged as the normal expenditure to be incurred on libraries that 15% of the enrolled students would have freeships and 5% would have scholarships that residential accommodation could be raised from hardly 10% of the student population to at least 25/ i.e for another 100,000 students at a total cost of Rs. 25 crores spread over five years, and that professional and technological education could be speeded up considerably

One important development that has occurred since the Education Commission made their Report is the undertaking by the Government of the country of a programme of planned development in the form of Five Year Plans. While this has in a sense led to a systematic implementation of some of the recommendations of the Commission, this also has had the effect of diverting available resources to other sectors of economic development deemed to have a higher priority

The provision for development of university education in the First Five Year Plan was only Rs. 27 crores. In the Second Five Year Plan, the provision has increased to 57 crores of which 27 crores is according to the Plan to be allocated to University Grants Commission, a little over 20 crores is to be allocated to the State Budgets and the balance directly to the budget of the Ministry of Education and Scientific Research at the Centre Expenditure in each *year on the development of* education is thus approximately of the order recommended by the Education Commission i.e. at the rate of 10 crores a year Unfortunately the basic assumptions of these recommendations have altered very considerably and for the worse, in this

intervening period of hardly eight years

The total number of students at colleges and universities had already risen to 420 000 in 1950 and advanced to 720 000 in 1955 giving roughly a ratio of 2,000 students per million of population against a somewhat smaller figure in U K. but almost 20 000 in the U.S.A. A conservative estimate of the number at present would be round about 850 000 Purely arithmetically therefore the sum available for the development of university education should now be atleast Rs. 30 crores a year whereas it remains at the original figure of approximately Rs 10 crores a year contemplated by the Education Commission for a number of students, one third of what it is today What is more on account of financial rough weather into which the Second Five Year Plan appears to have run, there seems to be an imminent danger of the budget provisions from year to year reduced far below the Plan allocations Statements have been made in high quarters that for the balancing of the budget and for enabling the core of the Plan to be carried out, marginal frills of expenditure would have to be cut. I hope these will not include education I should like to draw attention in this context to the observations made by the Chancellor of of Exchequer in Great Britain and quoted with great approval by the Education Commission The quotation is worth reproducing. In May 1948, Sir Stafford Cripps in a message to the University Quarterly said .—

> "The darkness of the economic outlook gives no ground for economy in the sphere of university grants. The universities have a great contribution to make towards national economic recovery We look to them to continue with unabated vigour the search for new knowledge and the education of increased numbers of young men and women for all classes of the community For it is on the advances that we make in scientific knowledge and on the energy initiative directive capacity and courage of these young graduates that the economic future of the country will largely depend "

In the year 1948 the Parliament of Great Britain allotted a sum of 12½ million pounds to the then 19 universities in

the country Within nine years, this figure has risen to further 30 million pounds for 20 universities for non-recurring grants and recurring grants to approximately 30 million pounds which gives a rough expenditure of Rs. 5,000/ per student per annum against the present expenditure of Rs 500/ per student per annum in Indian universities.

The University Grants Commission consists of 9 members appointed by the Central Government on the following basis

(a) not more than three members from among the Vice-Chancellors of universities
(b) two members from among the officers of the Central Government to represent that Government and
(c) the remaining number from among persons who are educationists of repute or who have obtained high academic distinctions.

One of the members of the Commission not being an officer of the Central Government or a State Government is nominated by the Central Government as Chairman.

For carrying out its functions the Commission depends on a smaller number of officers and a staff of assistants and clerks. The officers have advisory and executive duties and have to travel frequently to keep in touch with the universities The administrative expenses of the Commission in 1956-57 amounted to Rs 290 000/-.

There are at present 33 universities in India operating under Acts passed by the Central or State legislatures with which the University Grants Commission has dealings. For historical and other reasons, four of these universities, namely those of Delhi Banaras, Aligarh and Visva Bharati, are in corporated under Acts of the Central legislature. The other "State universities are under the jurisdiction of the newly constituted States. Roughly it can be stated that there is a university in India for every ten million of population. New universities are being established but in most cases the respective State Governments have not thought fit to ask for the advice of the Commission before the establishment of these new units They have on the other hand been prompt enough

to approach the Commission for financial assistance towards the development of these new units immediately after the passing of the enactment creating them.

There are various types of universities combining in varying measures the two main functions of teaching and examining The hundreds of colleges which are at the moment affiliated to universities are outside the purview of grants made by the University Grants Commission but there is a provision in the law by which in consultation with universities such institutions can be made eligible for the Commission s grants. The extent to which this will be done will obviously depend on the resources available to the Commission from time to time. *There is also provision in the law for notifying institutions* for higher education other than a university as deemed to be a university for the purposes of the Act. The Commission has to give a great deal of thought to the problem of laying down the criteria necessary for notifying institutions which are not universities in the strict sense of the term.

The total amount paid by the Commission to the universities including maintenance grant to the Central universities was as follows .—

		Rs
19 4-45	—	1,94,20,035
1955 56	—	2,65 75,329
1956 57	—	3 38 69 860

Of the allocation of Rs. 27 crores in the Second Plan on the basis of requests received from the universities and on other considerations the apportionment is as follows —

Central universities	—	Rs 6 crores
State universities	—	Rs 18 crores
Special Centenary Grant to Bombay Calcutta and Madras Universities on the occasion of the r Centenary	—	Rs 3 crores
		Rs. 27 crores
For buildings including libraries	—	Rs 7 19 crores
For equipment	—	Rs. 6 60 crores
For books	—	Rs. 1 62 crores

For salary enhancement for university teachers —	Rs. 1 10 crores
For loans to universities for university buildings and staff quarters —	Rs. 2.50 crores
For recurring expenditure on additional staff and development of departments —	Rs. 4 53 crores
For special schemes and minor items —	Rs. 1 0 crores
General Education assistance in what is known as the 3 years degree course —	Rs. 2.50 crores:

Then there are things that do not need money—academic improvements which only need small marginal expenditure, although they involve plenty of non-financial complications such as the medium of instruction the methods of examination, the intergration and coordination of syllabuses curriculae, the evaluation of standards—all these are engaging the active attention of the University Grants Commission.

The gist of the matter is that on account of the clamant needs of higher scientific and technological personnel, all the money that is needed for the expansion of existing capacity and establishment of new units will have to be found but, the situation holds great danger for the adequate development of the humanities and the pure and applied science side of the universities While a significant improvement of the existing poor facilities in respect of lecture rooms, laboratories and libraries, etc. is not likely to be held up for lack of funds so much as for the lack of necessary equipment from abroad requiring foreign exchange or the necessary iron and steel, the shortage of resources is likely to weigh heavily on the improvement of student accommodation student welfare the teachers salaries in the affiliated colleges attached to the various univer sities and the teacher pupil ratio

It is gratifying to be able to state that during the course of its operation during the last three years, the University

Grants Commission has succeeded in establishing relationship of the friendliest kind with the universities. The Education Commission recognised that a system of block grants for development would not be workable in India as it is in United Kingdom and that grants available for development would have to be determined on a careful consideration of the development plans of the various universities and in close consultation with them. Where resources are limited priorities have necessarily to be allocated, but this task has not presented any great difficulty Thus in the procedure employed by the University Grants Commission the development plans of each university are first examined by a Scrutiny Committee consisting of selected university men with competence in proper fields and after the approval in principle of these proposals their details are examined on the spot and in consultation with the university authorities by a Visiting Committee which consists of experts in the subjects concerned The copy of the Visiting Committee's Report is made available to the university and this has served to obviate any possible misunderstanding On the whole the universities have recognised the fairness of the decisions and the limitations which the lack of funds place on the goodwill, sympathy and understanding of their problems by the University Grants Commission. The meetings of the Commission are occasionally held at university centres other than Delhi, thus giving an opportunity to the members of the Commission to study university problems on the spot.

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WADIA COLLEGE, POONA*

SO far as my formal function is concerned, you have already seen how it has been discharged without even a word from me, merely by the pressing of a button. Nevertheless, I had better add that I declare open the Silver Jubilee Commemoration Hall of your Science Institute.

I am very grateful to the authorities of the College for their warm welcome and their kind references to me, and I am very happy to be able to participate in this function. Apart from my official capacity as Chairman of the University Grants Commission, in which capacity I am very greatly interested in the fortune, not only of the universities but of the affiliated colleges, there are many reasons why I am glad to be here. The first is that it is a joy to be associated with any educational efforts in this city of Poona which has so much pioneering work in education to its credit. Further some of the men associated with this College were my contemporaries, I think, in the Bombay University or in a university in the United Kingdom. I refer to Principal Khadye and Professor P L. Vaidya. Then I had the privilege to count Sir Ness Wadia among my friends, and I count Neville, his son, also among my friends I was also able to assist Principal Joag in getting over some little difficulty over the acquisition of the site for the Ruparel College in Bombay There was some little complication arising out of Income Tax dues, owed not by Principal Joag, but by the person from whom they had acquired the site and since the arrears were considerable a representation was made to me in

*Speech delivered at the opening of the Silver Jubilee Commemoration Hall on 27th September 1957

my former capacity as Finance Minister that suitable instalments should be given. There was a certain amount of risk in this proceeding but after noticing that there was a risk, I decided to take it as a calculated risk and I have been happy to be informed only an hour ago that the last instalment of Rs 90 000 was duly paid by the college authorities

I have read a very interesting account of the establishment and growth of this College in the Silver Jubilee Souvenir, and I have also read the graceful and flowing words in which that history has been recorded by your poet The record which has just been read out to you in picturesque and stately prose by Principal Saru is one of which any educational authority might be justly and legitimately proud The progress and the development of the College have been all that anyone could have wished for There is only one small matter in regard to which I entertain a little doubt, and this is in regard to the 'weight of the young Bombay Institution of the Society So far as the 'weight —that is the growth—of the Wadia College is concerned although it is on the high side it is not inappropriate in proportion to the general sturdy development of this Institution. So far as the radio active younger sister, the Technical Institute is concerned, there is nothing to worry over and I am quite sure that in course of time she will get over the slimness that has been noticed. But I am not quite so sure about the weight of Miss Ruparel. At the age of six 3,000 (lbs.) appears to be slightly excessive and is, perhaps in need of a carefully phased programme of dieting, because regulation weights in this class I may say are not nowadays allowed to exceed 1200 I have had a word about this with Principal Joshi and also with the authorities of the Bombay University and I have hopes that we shall be able to do something about this matter without involving too much discomfort for Miss Ruparel !

There are many pleasing features that I have come to notice in the report that has been read out to us. What pleased me was that within the short period of hardly a generation the Modern Education Society has been able to create assets worth Rs. two crores, and to find its students spread over the whole

country and even abroad, occupying high places and positions in different careers and vocations and other walks of life. I also appreciated the fact that the composition of the student body furnishes an inspiring example of the wonderful unity in diversity that is India. I shall not use the word 'cosmopolitan" because it has been used in a dubious sense in another context. I particularly appreciated the tribute—the just tribute it appears to me—that has been paid by Principal Suru to the attitude and behaviour of the students. They are intelligent amiable amenable and disciplined in spite of a little touch of gaiety and frivolity without which life would be very dull. It is a tribute to their minds which are fired by intellectual curiosity and aspiration. There is also evidence of their performance, I should say consistently good performance both in the class room and on the play field Furthermore, I liked the individual personal contact which the Institution has been able to maintain between the teachers and the students through the numerous activities of the Societies which have been established here and that, in spite of perhaps an unsatisfactory teacher pupil ratio. I also appreciated the interest that past students are taking in their college, and the establishment of the new Institution of Fellows of the Society That rounds off in my opinion, all that has been achieved by the goodwill of friends, the loyalty of students, the devotion of teachers, and, the college authorities have not forgotten to add, the beneficience of providence. This is, of course as it should be because, as the adage says "God helps those who help themselves."

Another feature which has appealed to me is the attention that has been given in spite of pecuniary difficulties to the promotion of students welfare There is reference here to the inadequacy of hostel accommodation which bears testimony to the solicitude which the college authorities have in this regard We have also heard a reference to the establishment of the Poor Students Assistance Fund. I believe that on account of a scheme which has been taken up by the University Grants Commission, it may be possible for the college authorities and those concerned with the running of this fund to enhance its utility Then there is reference to a very

important matter namely the emoluments of the teachers. I am very happy that the University Grants Commission has been able to put forward some kind of solution to this difficulty which had so far been regarded as insurmountable. In this context, I think, I ought to spend some time in explaining the relation of affiliated colleges to the operations of the University Grants Commission. Before the University Grants Commission Act was passed in March 1956 the practice was to exclude affiliated colleges from the pale of the bounty of the Commission which then was non statutory In the relevant Act there is, however a provision whereby it is possible to bring affiliated colleges within their pale in consultation and with the consent of the university concerned. But since the Second Five Year Plan was formulated before the University Grants Commission Act was passed and before it was brought into force on 5th November 1956, it has happened that the allocation out of which it was intended to help affiliated colleges to develop, has remained with the Ministry of Education of the Central Government and the sum allocated to the University Grants Commission is not intended or was not intended, to bear any part of the charge

You are probably aware however that the sum allocated to the Central Ministry namely Rs. 5 crores as well as its counter part (another 5 crores) with the State Government, Rs. 2½ crores from University Grants Commission and another 2½ crores from private management, is intended to be used as a pool for the introduction of firstly a three-year degree course and secondly of a number of reforms, the object of which is to ensure that the main reform is rendered as fruitful as possible. Now these reforms include the provision of additional accommodation the improvement of laboratories and libraries, the provision of equipment, the improvement of the teacher pupil ratio but not also the improvement in the emoluments of the teachers of the affiliated colleges It was this anomaly which pressed itself on the attention of the University Grants Commission which have somewhat hastily and prematurely I think two or three years ago announced a kind of model scale for the teachers of the affiliated colleges without the

backing of the financial support, either by the Central Government or the State Government, not to speak of the University Grants Commission We therefore feel that something ought to be done in this matter especially as in the meantime active steps have been taken to improve the salary of the university teachers. To cut a long story short, we have recently accepted a proposal of the Bombay University to improve the salary of the teachers of the affiliated colleges not necessarily on the model scale but a scale little lower than that, on the understanding that if 50% is granted by the University Grants Commission the other half will be found if not by the State then by the management of the affiliated colleges. We have circulated this new step to the other universities, and it is my hope as it appears to be the hope of Principal Suru, that the scheme will appeal to the Poona University and the managements of the affiliated colleges, so that something may be done to bring about this very necessary improvement.

This, I think, is the proper stage at which I must pay a tribute not only to the authorities of the Modern Education Society but to all those private bodies in this country which have so far played a prominent part in establishing and promoting, at very great sacrifice, institutions of higher education below the university stage for the people of this country I do not believe that the credit due to them has sufficient recognition. It is almost taken for granted that higher education is not the concern of the State Government or the Central Government. But, I think it is a matter which has to be reviewed in the light of our Constitution. Under our Constitution it is the duty of the State to provide free and compulsory education to young people up to the age of 14 I have no doubt, whatsoever that as in the more advanced countries of the West and elsewhere this age will be raised to 17 or 18 years so that the State will recognise that it is its duty to provide at least free education, if not free and compulsory education to all its young citizens below the age of 17 or 18 But apart from the countries under some authoritarian system of Government, I am not aware of any nation having levied upon itself the duty of providing free higher education that is to say

collegiate education to its citizens. Nevertheless it is quite clear that university education plays a vital and critical role in the economic development of a country especially on democratic lines and where such economic development is carried out by means of a series of plans, it is obvious that the State has to ensure that the necessary supply of highly academically trained persons including professional and technological persons is always available for the implementation of its plans. It follows, therefore, that since higher education thus plays an important part in our nation-building plans it is the duty of the State to spend its own funds on it and that if private managements are playing a part on account of their pioneering work, the least that the State can do is to ensure that they are enabled to run these institutions as they should be run, which means that, if, for instance, the strength of the college is regulated for professional and academical reasons the gap that it will create in the maintenance expenditure is found by the State. Further, I am of the opinion that if the States in India undertake this function which appears to me is clearly theirs then it is the duty of successive Finance Commissions that are to be appointed under our Constitution to ensure that the necessary funds are provided to these States Ultimately it means that these funds are transferred from the Centre at *whose disposal there are far more productive lines of* taxation for raising money than are available to the State Government. I do hope that the rationale of this will be accepted in course of time and that both private managements and the States will be enabled by the arrangements I have indicated to ensure that our education is carried on to the maximum benefit of the country

Principal Suru has referred to the Poona University and its developments. Like all newly established universities, your University has had to pass through growing pains, and there have been modifications necessary to certain teaching arrangements but I believe it is right to say now that all these difficulties have been left behind and that the development of the Poona University is proceeding at an accelerated pace In their task of development I hope that the University autho-

rities will agree that they are receiving sympathetic and under standing support from the University Grants Commission. If therefore, to the development of this University we add the revised attitude of the State and Central Governments in regard to the affiliated colleges, then we may be sure that the prospects for higher education in this part of our country will be as good as our resources permit

It is symbolic of the growth and development of this Institution, in spite of difficulties which it has had to encounter in common with others, that they are able today to add a wing. It is more than a hall it is a building of I do not know how many thousand square feet, which as Principal Suru said, is on a well planned foundation which has already provided for anticipated expansion. I say it is symbolic of its development *that they have been able to build this new wing and that I* have been able to discharge the pleasant duty of declaring open this Silver Jubilee Commemoration Hall of the Vicaji V D Taraporewalla Institute of Science, to give it its full title. I feel happy that it is somehow connected with science and that it will be used for instruction in the various scientific faculties.

There is somewhere in this Souvenir a statement that although at the moment the number of science students is much larger than the number of arts students, happily—I repeat, happily—the number on the arts side is also increasing. I do not know whether that represents a very correct attitude. I do not wish to be misunderstood. What I mean is that the relative development of science and the humanities cannot be measured by the number of students who are undergoing instruction We are, all of us free to recognize the importance of both. It hardly needs to be stated that if one requires a well-rounded well-developed personality since science and humanities are both parts of our lives, obviously they must both be parts of university life. But we must not forget the fact that the progress in the world of scientific thought and scientific discovery is proceeding at a tremendous pace, and that the science of today is almost unrecognizably different from the science of even ten years ago, whereas in the field of humanities every generation, every age, every epoch in time,

every person, every individual has to carry on a continuous sifting, for the establishment of its own values which is just the purpose of the humanities. But all this need not be reflected in the ratio between students taking science and students taking humanities.

This College is celebrating its Silver Jubilee. In a sense it is a tiny gain in the cosmos of university tradition In our own country in the past, we had universities which flourished over a period of thousand years. Today in the modern tradition in the U K in Italy and, I believe elsewhere, there are universities which are six or seven hundred years old to one of which I have the honour to belong. On the other hand, these particular twentyfive years happen to be a very significant period The young people of today are on the threshold of a new age a new age which marks, at least in our country the transition from the bullock cart age to the atomic age There is accumulating evidence that the significance of this age is such that it may reshape the whole of human life either destroy it beyond recognition or elevate it beyond recognition. There is a disturbing diversity of opinion in regard to the effect of radiation and almost everything under the sun is ascribed now-a-days to the atomic and other bombs. In another place I find the present age to be described as the Era of Prodigies.

A British psychiatrist said that tests on 500 British children born since 1945 proved that they were found to have intelligence far beyond their years Dr Thompson said that he believed that radio-active substances may be the cause of this. Dr Thompson, who holds degrees in medicine was helped in his research by university professors and educational authorities. "The result was wonderful"—he said, "out of the 90 children we tested in the age group 7 9 we found 76 with an intelligence quotient of 140"—which is recognised as near genius I hope it is not confined to the age group of 7 9 And it is not just a few the whole lot, including the dull ones are brighter On the other hand, somewhere else I read that these bombs were having strange effects on the lives of frogs that instead of having two legs they were developing three legs I do hope that that kind of effect will not operate here, and that, although

most of my young audience are destined to be Chaturbhuj I do hope they will not become Chatushpad because they must remember what the Persian poet has said —

चार पाये बरो किताबे चन्द

न मुहक्किक बवद ने दानिशमन्द

"The four-legged animal even if it is loaded with a few books, does not become either intelligent or learned."

The main point I wish to make clear is that even if there is a gradual increase in our intelligence or even if at the worst, our intelligence co-efficients remain where they are the accounts and records of successful achievements that we have heard today should not make us deaf to the fact that responsible educational authorities hold that the standard of higher education is falling in India. Now how does one reconcile such phenomena ? I should say that if an Institution like yours has done well, it is in spite of difficulties and that had the authorities not been vigilant, had the teachers not been devoted, had the students not been loyal, then perhaps the standard would have fallen I find that while we are busy progressing, other people are also busy progressing, and the competition is not less severe, but more severe Take for instance the question of sports, in which your college has distinguished itself—and by the way I congratulate them on their exciting recent victory in the field of cricket– I know this country has been progressing in sports. Even in this field, however we find that we are not yet able to get anywhere near the world record, except in one or two things like hockey badminton where we do not have to hide our faces tabletennis—we do not do too badly but in other branches of sports we have a great deal of leeway to make up. And in the main academic field I am afraid that we are not making ground but are losing ground. It is not the fault of the students, I am quite certain It is not the fault of the teachers—except in the case of generations which have come out of badly educated generations of students. I say that the fault lies principally with the Government in their not recognising the fact that far greater finances ought to be made available for this business of conducting higher education in the country

particularly in the case of scientific education, and that if we ignore this we shall be left far behind in this race. And that is, saying the least because we have the unique distinction of occupying the last place in almost everything in the international picture.

In other respects also we are very much behind so that the disparity is increasing and not being reduced So I do hope that this will be borne in mind by the College authorities and the students, and that we shall strain every nerve to reduce the distance between us and the other nations and it is only when we do this that the additions to the physical equipment, such as those I have just declared open, will prove fruitful and will enable the College to grow towards the building up of a Welfare State as our honoured Vice-Chancellor has said in his Foreword to the Silver Jubilee Souvenir

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POONA UNIVERSITY*

WHILE I feel honoured by the invitation extended to me to deliver this convocation address, I am also assailed by many doubts such as is it right on my part, as Chairman of the University Grants Commission, to accept so many of such invitations ? Have I anything worthwhile or new to say to the graduates for whom such convocation addresses are meant ? Do such addresses serve any useful purpose ? Had they not better be delivered by the Chancellor or the Vice-Chancellor himself ? Should not the addresses be *extempore* rather than written out and, therefore, somewhat out of date in these dynamic times ? In what limbo do the previous addresses lie ? Does anyone, except an occasional subsequent 'distinguished person read again these statements to which so much thought has been devoted by their authors ? I fear I have not found the answers to many of these perplexing questions but I have no doubt that in course of time I shall, in rationalization of my own official activities, draw up a code of conduct concerning convocation addresses In the meanwhile, in the interest of all concerned, I should like to suggest that all universities bring out a book of readings from past convocation addresses and make it available in the libraries for the benefit of students The afflux of time may have outmoded some of the theories of education adumbrated in these past utterances of distinguished guests rendered untopical some of their exhortations and even diminished the applicability of some of the moral and spiritual truths enunciated by them. But I have no doubt that there will be a considerable residue of permanent value in them

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*Delivered at the Convocation on 29th September, 1957

The Univerity of Poona will have perhaps no more than seven convocation addresses to deal with for compiling the sort of collection I have suggested. In order to put my own idea to the test of feasibility I have carefully studied the previous addresses all delivered by men of exceptionally high academic and other status and should like to mention by way of illustration, the important points dealt with by them.

In the very first address, that of Raja Maharaj Singh the then Governor of Bombay there is a reference to the growing acceptance of the idea of regional universities. The Right Hon'ble Dr M R. Jayakar the first Vice-Chancellor—to whose splendid stewardship so many deserving tributes have been paid in later addresses—discussed in some detail how India s universities could help to promote plans of national education. He emphasized the prime necessity of Indian universities providing liberal education, and in order that it should be assimilated by young persons of varying intellectual capacities and natural bents of mind, advocated well-ordered landing-place from various points in the educational ladder Dr Homi Mody in the following year advised the university authorities to guard against the temptation to expand its activities indiscriminately Shri Girja Shankar Bajpai, developed the theme of culture and the advantages which a university generally has in nurturing and fostering the tender plant of culture and the special advantages of the University of Poona in providing for a study of the very core of Indian culture Following him, Sir Mirza Ismail referred to universities as the nurseries of the future leaders of the country and drew attention to the need of reinforcing research and original works in Science History and Literature on the one hand, and making education broad-based and not over specialized in the first degree stages, on the other Dr Harekrushna Mehtab thought university education as indeed the whole system of education should be related closely to the prevailing economic conditions and problems of a country but Shri Sri Prakasa urged that education had value not for the entrance it secured into a profession but for the guarantee it gave of knowledge of specified subjects of social culture of capacity to think and

judge for oneself and enhance one's usefulness to one's fellow beings and society

On the academic plane there is a great deal in the previous addresses in regard to the medium of instruction Rajah Maharaj Singh advocated elasticity in the choice of a medium and tentative steps towards the ultimate replacement of English by regional languages. While conceding this Mirza Ismail entered a strong plea for the preservation of English as a national asset. Shri Sri Prakasa asserted emphatically that university education could not be given in any language other than the mother tongue and wanted the adoption of our own language for the purpose as early as possible, without waiting for textbooks to be written or technical terms to be evolved

In this connection I consider it relevant to refer to the recommendations made by the Official Language Commission in regard to the medium for university education. They begin by recording the fact that it is widely recognised that the present general medium of instruction in the universities, namely English has to be eventually replaced by Indian languages, although they recognise that for a long time to come, in some of the faculties, especially in the field of scientific studies, English will have to continue as the medium of instruction. As they see the matter the replacement of the medium will come in what is known as humanities first thereafter probably in the professions and lastly in the scientific subjects. So far as the question is as between regional languages and Hindi, their recommendations are as follows —

1 Universities should have the freedom to decide for themselves whether they would adopt the regional language or Hindi as the general medium in their respective universities.

2. It may be left to the universities themselves to decide in concert with each other and after due deliberation in their established organs of consultation like the Inter University Board in what faculties, particularly in the professional subjects and Natural Sciences and at what stages particularly whether in the post graduate stage, the teaching should be through a common medium of Hindi alone in all universities on the displacement of the English medium.

3 All universities should in any event be required to arrange to examine students offering themselves for any university examinations with Hindi as the medium of instruction

4 All affiliating universities should also be under obligation to offer affiliation on equal terms to any colleges or institutions teaching through Hindi as the medium of instruction for any of their courses in the territorial jurisdiction of the university

They suggest that if the displacement of the English Language in the educational System takes place in the manner they have envisaged no prejudice will be caused to the industrial, cultural and scientific advancement of India and in fact, *advantages would accrue immediately in the field of cultural* development and eventually in respect of industrial and scientific advancement as well

Since the University Grants Commission has appointed a Committee of its own to consider and report on the same sort of problem and is awaiting that Committee s report, I shall not add comments of my own, except to say that from a pragmatic point of view flexibility, allowing of the optional use of regional language English or Hindi by the university teachers, will have to be permitted with reference to the linguistic capacities of the teachers themselves as well as the quality of the knowledge of Hindi or English acquired by the average student at the end of his Secondary School education.

Returning to past convocation addresses, I should like to refer briefly to the exhortations to the graduates Raja Maharaj Singh emphasized the cultivation of hobbies by students. At this stage, I might with advantage, refer to a scheme promoted by the University Grants Commission for the establishment of Hobby Workshops.

You will be interested to learn that the University Grants Commission has approved of an experimental scheme for setting up of a Hobby Workshop in Indian universities the *intention being to try the scheme in not more than* ten universities in the first instance to be selected for this purpose by the Chairman. The scheme is based on recognition of the value of providing facilities to university students for the pursuit of

certain kinds of hobbies for the development of their persona lity These hobby activities will not form part of any scheme of general education and any steps that may be taken to provide them would be extra-curricular They would not be means of enabling the students to earn an income, although the univer sities might, at their discretion, allow the products of the workshops to be taken away by students on payment of cost of material or a nominal charge Any income that the workshops may receive would, however be credited to the workshop account. These facilities would be in addition to any extra-curricular activities that may exist in the universities, as for example, painting or dramatics and their aim would be to provide opportunities for the pursuit of some other activities involving the fruitful application of knowledge derived from scientific subjects. The University Grants Commission might assist some of the existing cultural facilities like music and painting, and purchase of musical instruments and such other equipment needed for hobbies of a cultural kind will be considered by the Commission but the grant towards these objects will be limited to Rs 1 000 for equipment and Rs. 1 000 per annum for staff. The normal pattern of Hobby Workshops would provide for carpentry and wood turning, smithy and metal workshops assembling of electronic and electrical appliances, photography clay modelling and papier mache The financial assistance to each selected university for the setting up of Hobby Workshop will be limited to Rs. 25,000 for buildings and Rs 25,000 for equipment in addition to Rs. 5 000 per annum for staff and replacement of equipment. The university will be expected to finance out of its own resources any expenditure beyond this amount.

In more than one address the University was advised from the outset to encourage its staff and students to establish close connection with rural areas and the people that live therein and to ensure that special attention is paid to the cultivation of a spirit of social service. I am happy to notice that the Univer sity has not lost sight of this noble objective and has been running centres of extra-mural studies and summer schools. I am also pleased to find from the latest Annual Report of the

University that the first Labour and Social Service Camp for college students was conducted on the University campus with great enthusiasm and success, as a pilot project in which students from nearly all the important centres within the University's jurisdiction participated. I hope that the success of this experiment will encourage its rapid and wide extension. Paucity of funds may prove a limitation as it appears to have in the case of assistance to various students welfare organizations. This seems the appropriate stage for me to mention a scheme in this connection which the University Grants Commission has very recently approved with the hope that it will appeal to university authorities and students.

It will be of some interest particularly to the students assembled here to learn that the University Grants Commission have approved of a scheme for the establishment of a Poor Students Aid Fund in the universities with the object of rendering financial assistance to poor students to meet their tuition or examination fees or to purchase books or meet similar other expenses, but not in the form of scholarship. The intention is that the constitution, functions and administration of the fund shall be framed by the university and rules promulgated to regulate the grant of financial assistance to poor students. A condition for the establishment of the fund is that every student of the university should contribute at least Re 1 per annum to the fund. The University Grants Commission will contribute each year a sum equivalent to the total sum contributed by the students subject to a maximum of Rs. 10 000 per annum. The fund is to be administered by the university concerned but students will be associated in a suitable manner with the body appointed to administer the fund.

It is for the university to decide if such a proposal is acceptable to them and, if it is, to forward a detailed scheme for the purpose to the University Grants Commission.

Those who take the trouble of studying the previous convocation addresses will find them brimful of all kinds of sound advice to young men about to commence their encounter with life after the completion of their academic career. The inaugural address embodying the age-old exhortation of the

Upanishads, beginning with *satyam vada* finds its echo in the commandment quoted in Raja Maharaj Singh s address of Honour thy father and thy mother' and "nor must any of you students forget those who taught you." "Look upon them as your friends and guides throughout your life The Right Hon'ble Dr M R Jayakar concluded his address by quoting the well-known Vedic hymn beginning with *Sangacchadwam, Samvadadhwam* Advice of a more personal nature is contained in the address of Dr Hormi Modi who asked his young listeners to abjure any tendency *towards slovenliness in dress* and personal habits to cultivate simple virtues such as punctuality and courtesy and to equip themselves for the tasks that await them, especially in the field of publi affairs by acquiring a working knowledge of the country—its economic conditions, its potential resources, its political set up and the principles emodied in the Constitution. He also emphasised the primary aim of education to be to plant in the student a healthy curiosity a capacity for observation and desire for acquisition of further knowledge. Shri Girja Shankar Bajpai had a few wise observations to make on youth as the season of *revolt revolt which questions all that is old is not only* unafraid of but eager for adventure seeks change to make the good better or the bad good but which is not declared for its own sake in a spirit of recklessness, and is controlled by reason. He warned against surrender to temptation without weighing all the consequences and laid special stress on the duty that rests on every individual in modern society to think and work not only for himself but also for society

Shri Sri Prakasa made an important suggestion, which I should like to support. He finds that as a general rule students forget their *alma mater* the moment they leave her and they do not run to her succour as they do in other lands, when she is in need and so in danger of losing her freedom by having to ask for help from others. He hoped therefore that in this new young University the opportunity will not be lost of building up a strong Old Boy's Association through which all who go out would keep in touch with each other and also with the mother institution and extend to her such assistance as lies

within their power I remember to have read somewhere that in the U.S.A. there are very active alumni associations and that they often collect sizeable sums for the support of their university whenever it is in need. An association of this sort seems all the more necessary in these days when the stream of endowments appears to be shrinking, judging from the figures given in the various Annual Reports of the University I might mention in this connection that the duty of supporting the university serving a particular region rests, not only on its alumni, but also on all other enlightened and well-to-do elements in the area, which must consciously or unconsciously directly or indirectly ultimately depend on the university for the enrichment of intellectual moral and spiritual as well as economic life The growing awareness of this relationship is evidenced by the general support which is extended to universities by organised industry in the more advanced countries of the West, particularly for the furtherance of research.

A recurrent theme in this country in connection with the purpose of a university and the quality of its products a theme which has claimed increased and more anxious attention of late, is that of intellectual nation-building as the Right Hon'ble Dr Jayakar put it or simply as national unity, as Shri Sri Prakasa called it. The latest phrase for the theme is emotional integration of the country In order to promote a common veneration of one another's culture amongst India's diverse elements the Right Hon'ble Dr Jayakar recommended the creation of a faculty of Indian Culture as a compulsory branch of study at the University a discipline calculated to enlarge the frontiers of the students sympathy knowledge and understanding and to lead to a thorough appreciation of the delectable mosaic the fascinating fabric that is India's culture. Shri Sri Prakasa developed the theme in relation to the medium of the mother tongue in education at all stages and reorganisation of States. He seemed to think it possible to develop the Indian languages and create great literatures in them without necessarily organizing States uniformly according to languages.

I have so far refrained from stating my views in the matter very explicitly since any attempt on my part to do so

might make me stray into fields in which I have no longer any official interest and since at any rate a convocation address is no appropriate place for developing any views that I may hold in the matter with the amplitude that it deserves Suffice it to say that I do not regard a unilingual State as the *sin quo non* of all cultural or social or economic development, nor a bilingual State as necessarily a threat to democratic growth, especially where, as in India, one is dealing with bilingual States with languages both belonging either to the Indo-Aryan group or the Dravidian group Examples are not wanting in the world of full integration in nations where two three or four or even a larger number of languages are spoken Such integra tion is possible if one fundamental condition is satisfied, viz. the purposeful reduction and ultimate elimination of regional disparities or disparities as between class and class. Even a unilingual State is no paradise if disparities persist and even a multilingual State can be a haven of peace if they are eliminated Myrdal in his book An International Economy' has discussed this problem of integration on the international level and has come to the conclusion, very justly in my opinion that no integration is possible where inequalities grow instead of diminishing and in the absence of a world Government in the truest sense. National integration is possible as in Sweden, where the nearest approximation to a classless socialistic welfare State has been achieved and in the international sphere much can be done with more insistent and wider recognition of common responsibility of the more fortunately placed nations for the economic development of under developed countries.

The application of all this for national integration is obvious. In my opinion much of the apparent fissiparous tendencies and discordances will vanish if a more earnest study is made of regional disparities and more conscientious and energetic attempts made to remove them However this is a theme the enlargement of which I must reserve for some future occasion.

I must not forget to congratulate those who are today receiving their degrees on their success and particularly those who have won distinction of one kind or another An academic

distinction is to my mind the most satisfying of all distinctions, won as it is by fair competition at a stage of life when according to experts an individual s intellect has attained its maximum development—thereafter we acquire experience wisdom even cynicism and scepticism but no greater efficiency of the mind.

It will not have escaped notice that I am not offering much advice or guidance of my own to those who will from today begin their journey as full-fledged citizens. More than one reason prevents me from doing so In the first place, I doubt if advice ever does much good or makes much of a difference. Secondly I imagine that if the University has done its duty by you, as I am confident it has, you have already in the armoury of your make-up all the aspects of a well-rounded well-balanced personality that a university life is supposed to develop In short you must already be as wise as you are learned. But perhaps stronger than either of these reasons is this, that I have little in the way of cheer for you, to make palatable any advice that I may have to offer On behalf of the older generation, especially those in authority I feel, rather like apologising to you young people, for not introducing you to a better managed world of affairs. The world into which you will be struggling to fend for yourselves is one which will more probably dim rather than augment, the lustre of your intellectual moral and spiritual endowments and attainments. You will perhaps be unpleasantly surprised to find practices widely differing from the principles inculcated in you, expediency elevated on to an undeserved pedestal, self seeking of every shade and form outrageously rampant and fear the main motivation of action rather than conscience and an uncompromising sense of duty You will probably discover that greed of pelf and power are the main springs of the action of too many in society and genuine freedom of thought speech and action frowned upon as disruption of unity

On the material plane I fear that you will find the Second Five Year Plan, on which so many hopes of broadened employment opportunities have been planned, encountering rough weather except perhaps the organized private sector which has had more than its due share of attention paid to it at

the cost of the security and integrity of the official Plan. You may be tempted to suspect, although it would be wise to withold judgment for a while that in agriculture, which still remains the linch-pin of the Plan the increase in production is not currently of such an order as to sustain a Plan of this magnitude There seems also to be an imminent danger of social services, particularly university education being regarded as an unimportant fringe of the Plan, only the core of which will receive the concentration of attention and resources of its fulfilment. If foreign assistance in adequate—which means ample – measure is not forthcoming soon the implementation of the core of the Plan, will mean I am afraid, far greater sacrifices than you were led to expect against a background of not rising but falling standards of living.

What is your duty in milieus like these? To my mind plainly it is to grit your teeth clench your fists, brace your feet, gird up your loins and work and stint as you have never been taught to do before. I am aware that human beings cannot live at a level of intensity above the normal for any great length of time But then, the circumstances are wholly exceptional. Firstly there is the patent fact that India's economic development has been retarded by historical misfortunes, far behind other countries of any size in the world, particularly an important country in Asia like Japan so that there is every possibility of India being left far behind on the road to progress by the great country with which she is often compared viz. China Secondly even apart from comparisons, unless India s economic development and consequent rise in national income per head occurs at a certain minimum annual rate, significantly in excess of the annual rate of increase in her population, the standard of living of the common man in India will fail to improve, a failure which will be progressively more glaring with the passage of time The time for supreme effort is now or never What has posterity done for me that I should do anything for posterity?' is an amusing quip, but since posterity has no choice in the matter of paternity or motherland the least we can do for it is to ensure as

best as we can that life is a little happier and fuller for them than for us

The important thing to remember is that whatever the wisdom and achievement of authority or the lack of it, want of the maximum individual effort can only make things worse. It is true that individuals are not often able to find work although fully anxious to do their best, or that systems of incentives to work are often defective or non-existent. But no failure on the part of society can absolve the individual from the duty to do his very best and to work his very hardest. If society pays attention to the individual it is only right that an individual should pay attention to society And it is astonishing how much more than his own assessment of his capabilities an individual can do if he is determined to drive himself

I shall conclude by reproducing a quotation I found in a recent book on Higher Learning. It will probably inspire you more than any words of mine as it sets out the ideal of a university life expressed by the President of a Student Union in Great Britain —

> "We are fortunate people the whole range of human knowledge is ours. And yet what an enormous universe how scientifically inexplicable, how philosophically confounding! Schooled in such a world as this, be set with such a great host of the learned, who will not marvel at his endless opportunity? We shall take our place reassured by the learning we have acquired mellowed by a sympathetic understanding and broadened by a knowledge of the world

शिवा वः पन्थानः सन्तु ।

12

ANNAMALAI UNIVERSITY*

I feel doubly privileged in having been called upon to deliver this Convocation Address. In the first place as Chairman of the University Grants Commission I have in the past been required to bear more than the normal load of responsibilities which men in public life have to carry in this connection and I think that is perhaps both unavoidable and indeed justifiable as the Chairman of the University Grants Commission has closer relations with the world of the universities. In the second place I am delivering this Convocation Address after having been honoured by the Degree which has just been conferred on me. This again only draws closer the bonds of common interest that unite the Commission of which I have the honour to be the Chairman, on the one hand and the Indian universities on the other hand. Although this is by no means the first Degree that has been conferred on me by an Indian university since my taking up the office of Chairman, I do not feel that it is what the French call *embarras de richesse*. I regard such a Degree, honoris causa, as the expression of the good-will, regard and amity of the university conferring the honour in each case feelings which are naturally agreeable to me, and the development of which is certainly calculated to further the common interest which the University Grants Commission and the universities share.

Of the famous phrase "liberty equality and fraternity" which all of us in the modern world have learnt from the French Revolution it appears to me that the last has somewhat

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*Delivered at the 27th Convocation on 19th October 1957 at Annamalai Nagar

lost its original pristine purity and, indeed there are some who would be tempted to regard it as a definite casualty judged from the sense in which the phrase was originally meant. The reasons are not far to seek Whereas liberty and equality are ideas the universal application of which is not too difficult to conceive, understand or apply, the frontiers of the area of fraternity are often not so easy to determine on account of what each individual family group community or nation imagine, is owed to them by the rest of the world It is possible nevertheless, that in the march of human affairs during the last 150 years the horizons of fraternity have been steadily extended Fraternity now is for all constitutional purposes merged in the conception of a nation and in a very limited sense and over perhaps very limited spheres of human activities, one could almost apply the term to the relations that exist between the members of an international community Nevertheless, it remains true that from the international point of view there is hardly anything in the world today which could be identified as the expression of a feeling of fraternity genuinely meant and expected. Even in the international sphere I am not sure that fraternity is as live a force as one would like it to be Indeed judging from the utterances of most respected statesmen, it would look as if even here in this newly forged nationhood of ours, clothed with all attributes of unity in diversity in the day-to-day affairs of the country the greatest danger to what has been achieved appears to be the lack of achievement of a real sense of fraternity Fraternities of an undesirable kind there are in ample measure, each seeking to advance its own position at the cost of others by any means, fair or foul. But the orbits of such fraternities are many, each narrower than the other It is in the recognition and rectification of this phenomenon that the future of the country lies, and it is this therefore, that must be at all times present to the minds of those that represent the generations destined to play their various roles in the life of the nation in future namely, the university students.

Those successful in the Matriculation examination have never in our country or any other country to my knowledge

had the advantage of anything resembling a convocation address and yet it seems to me that it is those who passed the Matriculation or an equivalent examination entitling them to admission to the universities that need most the sort of exhortations that are given so regularly and so generously to students of universities who have won their first Degree Although in my young days, therefore, I did not have the benefit of a convocation address on entering the Bombay University I am happy to recall that by a singular piece of good fortune I was favoured with a congratulatory poem by one who later developed into one of the most famous poets playwrights and authors writing in Marathi namely Ram Ganesh Gadgari whose pen name was Govindagraj I happened to have done particularly well in that Matriculation examination now 45 years away and my success appealed to the then hardly known poet and inspired him to compose a poem of felicitations, which many include among his finest pieces and which finds a place in most anthologies of his poetry I remember some of the several beautiful lines in that poem which runs as follows .—

> Mi, mâze kul, majhi jati samâj mâjhâ hâ
> Shri mânavatâ Devî majhi Ishwar micha aha
> Ashâ bhâvanâ mani theunia Ja varati varati.

The meaning of this is that I should rise ever higher entertaining in my heart the thought that there is an ever widening horizon from I the absolute ego to god-head the ultimate passing through the stages of I my family my community, the society I live in humanity in all its sanctity and finally identification with the spirit that is god head (whatever one s conception of god-head may be) These lines have ever since been ringing in my ears and have served as an unfailing guide in the determination of my relations with the world of men around me. I have never had any difficulty in determining the proper frontiers of good-will regard and affection for each of these concentric circles, and I have always held that while no man can escape from the sensation of belonging to more than one orbit lesser than humanity at large, it is perfectly feasible for everyone to keep a balance

between the legitimate interests of any particular orbit and the overall interests of the larger orbits. The failure of the conception of *fraternity* has to my mind lain in the failure to keep such a balance and in the attempt to transfer to smaller orbits advantages which by right must be shared with each larger one in successive stages of interestedness In other words the problem is only a facet of the general problem of the relation between an individual on the one hand and society on the other hand a subject on which many a philosopher both ancient and modern has written profoundly and wisely The general consensus of opinion would appear to be that if an individual insists that society owes something to him society can in turn insist that the individual owes many more things to society

This would all seem to be somewhat remote from the matters which are expected to occupy our attention today But I feel that proper understanding of these relationships between the individual and society is the very basis of a sound and worthwhile university life It is the understanding of these principles that will ensure that the universities will discharge the functions which apart from some utilitarian matters on the fringe are expected to be fulfilled by modern universities especially in countries operating some form of parliamentary democracy the key-stone of which is the preservation subject to certain essential safeguards of the freedom of spirit of the individual.

Here in your University you have a unit which would *perhaps tend to render somewhat intense a cultivation of that* freedom of individual spirit unless special pains are taken to ensure that proper links are forged with the life of the University and the life of the country side around it as well as the life of the country In other words the alumni of the University who are encouraged to live a closely knit corporate life of their own would have to take special care to remind themselves of their responsibilities towards the widening horizons referred to by the Marathi poet whom I have quoted earlier

The Annamalai University was established some 28 years ago at a place which apparently had no special advantages to be the *seat of a modern university It is true that the neigh-*

bouring town of Chidambaram was famous for one of the most imposing shrines amongst the many in the South and there was also the Meenakshi College. But the latter had been set up by the Founder of the University himself the late Raja Sir Annamalai Chettiar and was in fact the focal point of the University The establishment of this seat of learning was the fruit of that combination in the illustrious founder rare in the world, namely of a vision straining towards the attainment of all that is best in human culture and a hard headed awareness of what science and technology are capable of achieving for the betterment of the lot of mankind. The region in which the University exists is far from prosperous and in the beginning the circumstances in which the work of the University had to be carried on and the conditions in which the teachers had to teach were such as would have been regarded as thoroughly discouraging. In many other respects amenities were of the most modest description and are not even today comparable to those enjoyed in centres of learning not very far away

Nevertheless, considering the handicaps with which the University started and the comparative limitations of its resources it is a matter for sincere satisfaction that the Univer sity has made remarkable progress. This success reflects credit not only on the illustrious Founder himself and the long and distinguished line of Vice-Chancellors, but also on the teacher and-pupil community as it existed from time to time In certain fields of scientific research, such as the Marine Biological Research at Porto Novo as also in technology the University has forged ahead. In the humanities its disciplines cover a wide range perhaps too wide for its resources in certain Depart ments of Literature and Arts. The Five Year Plans of development of the University have been scrutinized by the University Grants Commission and already grants for certain developments have been communicated to the University authorities and further communications of this kind are expected to follow I have no doubt that with the perfect understanding that exists between the various University authorities on the one hand and the officers and Members of the University Grants Commission on the other hand, the development of this seat of learning will

be carried out in the optimum manner having regard to the availability of resources both with the University or the State and the University Grants Commission

The Annamalai University was established long before the University Education Commission deprecated the purely affiliating type of university in India and expressed their decided preference for unitary and residential type of universities to the extent of indicating as the ideal situation the conversion of every university of India into a unitary and residential type It was recognised even at the time that the pressure of numbers on universities was increasing fast and that the implementation of the recommendations of the Commission would involve massive expenditure. But there was not at that time available any conspectus of a planned economic development for the country on the one hand and even an approximately accurate calculation of the resources likely to be available for the purpose on the other hand. Even now incidentally although exercises in these matters have been formally made in the shape of the First and the Second Five year Plans, the difficulties into which the Second Plan has run illustrate the complexity of the task of fitting resources to this business of planned economic development But the picture is sufficiently clear to indicate far more precisely now that it means to establish and develop a university of each of the three or four types that are mentioned in the Report of the University Education Commission. There is now ample material to indicate the great difficulty in the way of developing university education in India and the raising of standards for the nigh on-million students who must be getting university education at present, if all the universities are to be of the unitary and residential type Today on each of these million or may be 850 000 students the expenditure of all public authorities together per annum is likely to be a little below Rs. 500/-, each university taking care on an average of about 25,000 students. But the range of variation of both these figures is very wide indeed In regard to the expenditure I have no doubt that in a unitary and residential university the figure would be perhaps very near Rs. 1,000/ per annum per student, while for a purely affiliating

university it would be appreciably lower than Rs. 500/ Similarly while at one end of the scale there is one university looking after the higher education of over 90 000 students, at the other there is another university which looks after barely 500 students. To take comparable figures relating to a country where nearly all the universities are of the unitary and residential type, namely U K, 20 universities and two colleges akin to universities have an average of about 4,000 students per institution the maximum being well nigh 20,000 and the minimum about 600 Two famous seats of learning, now five or six hundred years old namely Cambridge and Oxford, have each round about 8 000 students, while many of the other city universities have between 3000 and 4,000 students. The public expenditure per student per annum in the U K is equivalent to Rs. 5000/- and although some of this may reflect the markedly higher rates of salary that universities and public authorities can afford to pay to their teachers, in conformity with the levels of salaries obtaining in other strata of society in the U K., much of the expenditure must represent the creation of appurtenances, equipment, and teaching, laboratory and living accommodation considered to be necessary for the life of a unitary and residential university Perhaps the only exception is the London University where a large proportion of the students live in outside halls of residence or licensed lodgings

It is clear therefore that although the conversion of every Indian university into a unitary and residential university is an ideal it is an ideal as far as the Pole star to which proverbially one has to hitch one s wagon It is against this background that I view with dismay the growing tendency for almost every educational centre of importance and occasionally a centre without a single institution of higher education, to demand from its political leaders a unitary and residential university Political pressure has recently led to the establishment of several such universities without any sort of consultation with the University Grants Commission and I have no doubt many such universities are in the offing In one State as now formed after re organisation there are now no fewer than four universities for a population of ‹6 million, not a single one of which

has been properly established or is likely to be developed in a satisfactory manner within the resources available to the State Government It is the acute realisation of their responsibilities towards existing universities, and the relatively inadequate resources that have been placed at their disposal that has led the University Grants Commission to decide that it will have no funds to spare for helping in the establishment of new universities especially those prior to the establishment of which they have not been consulted, or to spare much for their deve lopment even if the parent Governments had given proof that they have equipped these new born universities with the modi cum of physical and academic equipment and appurtenances I mention all this because I wish the unitary and residential universities to realize that with the funds at their disposal and total number of students in regard to whose higher education standards are to be raised in the nature of things, resources will always be less than what is ideally required for developing them at a rate fast enough to give general satisfaction to the various elements composing the university

Many of our unitary and residential universities are situated in cities which have already a well-developed economic and social life and which are likely therefore, to provide a favourable background for the promotion of developments in various fields of scientific and technological knowledge in this fast changing world of ours. The danger to which such univer sities are exposed is that, unless special efforts are made they are likely to be out of tune with the moods and special needs of the rural areas surrounding them. On the other hand the risk in the case of universities situated in remote rural places is that they might tend to become intellectual back waters out of touch with the main currents in applied science and technology They also suffer perhaps from a certain lack of civic amenities, although this again could not perhaps be called an unmixed evil as the urban environment has its own demoralising influence on the student community which is more diverted and distracted by the shallow attractions and easy superficial facilities of cities without drawing any deep intellectual inspiration from the rich and varied life that

is often possible to teachers and students in such well developed urban centres. In a centre like Annamalai perhaps one of the means of keeping in touch with the world is a good bookshop (like some of the famous bookshops at Cambridge and Oxford) where opportunities for browsing amongst books are available to the students. The University library cannot wholly serve this purpose, and the University authorities might consider setting up a University bookshop where such contact with new literature might be made possible.

With such safeguards against falling into intellectual back waters a university set up in a truly rural area has its own advantages, if it deliberately aims to relate itself to the life of the rural community round it. I am aware that this is one of the needs that the University has already given some thought to. I notice that the University has an Agriculture Department, providing instruction to the highest level i e Post graduate and Research, and that it has inaugurated an experiment of making the student work on the field with modern appliances and modern appurtenances but close to and side by side with the villager. There is also a Rural Civic and Social Welfare Department. If one of the functions of a university is to provide leadership in developing a contemporaneous culture bringing the best that is thought and said in the world within the range, not only of the students and the university but also of the surrounding community then the Annamalai University is on the right track in not being content with reproducing patterns of a somewhat sterile traditional culture but in seeking to provide leadership in the matter of appropriating progressive elements from the culture of the world today. Perhaps the University could not only improve ways of intra mural living but could also undertake extension work in the surrounding areas. Some of the scientific research in the University could be devoted specifically later to the betterment of living conditions in that area.

I understand that the University has recently set up a Social Science Department which is intended, in part to study some of the problems of the neighbouring communities. The work of this Department should be of great interest to all in

the University Perhaps from studies that may be undertaken of the agrarian economic and social problems of communities in the neighbourhood it may be possible to evolve projects of research in engineering agriculture architecture etc., calculated to apply scientific knowledge to the living needs of the people

I mentioned in the beginning of my Address my impression that the tract in which the Annamalai University is situated cannot be described as among the most prosperous tracts of our country This leads me to some general reflections on the question of regional disparities in the world and the ways and means of minimizing them Myrdal in his 'An *International Economy* has proved that the trend in the world is towards increasing inequality For generations the richer countries have been advancing and the poorer ones stagnating. At the same time the rich nations have a shrinking proportion of the world's population so that, taking mankind as a whole, one can say that from one point of view there has actually been no progress at all in the matter of the lessening of inequalities or disparities The per capita real income, according to Myrdal, and with it the average human being s standard of living is probably lower now than 25 years ago perhaps lower than in 1900 He points out that no integration is possible in such growing inequality in advance of world Government in the truest sense But the example of some nations, particularly in Northern Europe has shown that national economic integration is possible and has been achieved. Just as there seems to be a greater insistence and wider recognition of common responsibility for economic development of under developed countries, there must also be within a nation an even more extended and wider recognition of common responsibility for the economic development of under-developed or backward regions.

In theory Governments in India are committed to the removal of social and economic inequalities and disparities. I fear sufficient attention has not been paid to this question of

regional disparities although from time to time lip-homage is paid to the desirability of doing so I understand that recently some studies in this matter have been completed and submitted to the Planning Commission and it is my hope that such systematic studies will be followed by genuine and active efforts to bring about a greater equality among the different regions of this country Without such determined efforts no amount of propaganda and discourses and exhortations will achieve the real and enduring emotional integration of the country

In his introductory address on the occasion of your Silver Jubilee celebrated in February 1955 the then Vice-Chancellor said : "We have come to the conclusion that situated as this University is side by side or almost in close proximity to two great centres of inspiration the shrines of Sri Nataraja and Sri Govindraja, it is our duty in every possible way to maintain, enhance and augment the rich heritage of culture and tradition of which we are the heirs." I hope that in pursuing this objective you will not forget that that culture and tradition has made notable contribution to the rich amalgam that is India s culture. According to Dr Suniti Kumar Chatterjee, the basic culture of India is certainly 50 per cent Dravidian, although expressed in the main through Aryan languages. Some of the deepest things in Hindu religion s culture e g. Puja, the practice of Yoga, go back to the pre-Aryan period. The belief in the transmigration of souls and the moral law behind the conception of Samsara (mundane life) originated on the soil of India through a realization of the deeper notions of life and a future world which were current among the thinking sections not only of the Aryans but also of the Dravidians. I hope that your well-developed cultural departments particularly the Tamil and the Oriental Departments are fostering the recognition of this remarkable cultural phenomenon—the Indian man representing the great synthesis of diverse races and cultures, one of the most remarkable phenomena in the evolution of humanity

Someone has wisely said 'culture is civilization absorbed and operative In felicitating and wishing well those of my fellow graduates who are about to face the hurlyburly of life I express the hope that they will in their individual lives safe guard and reinforce the culture they have absorbed in the Seat of Learning. This calls for self-discovery and mastery of self but the effort is worth making for the fruit is conquest. Here is what one of your greatest poets—Bharati—has to say on the Conquest of Self The poem is entitled Athmajayam*

What reaches the eye
Cannot the hand reach out to it ?
The sky seen from the earth.
Can we not make it our own, is it beyond us ?
O primal force
That fills sky and earth eye and mind !
Are we merely to dream and dream
And toil
And in the end slump in a futile heap ?
All that the heart yearns for
All gifts
Glory and merit and all else noble
Can be ours
Yea, if only we conquer self
So spake the sages
Ages ago
And we who hear now and know,
Are we to stand listless nerveless
Sunk into nothing ?
Is it beyond us, this power,
The power to win
And rule the self ?

The Original in Tamil is as follows.

ஆத்மஜெயம்

கண்ணில் தெரியும் பொருளினைக் கைகள்
கவர்ந்திட மாட்டாவோ ? — அட
மண்ணில் தெரியுது வானம், அது நம்
வசப்பட லாகாதோ ?

எண்ணி யெண்ணிப் பலநாளு முயன்றிங்கு
இறுதியிற் சோர்வோமோ? — அட,
விண்ணிலும் மண்ணிலும் கண்ணிலும் எண்ணிலும்
மேவு பராசக்தியே
என்ன வரங்கள், பெருமைகள், வெற்றிகள்
எத்தனை மேன்மைகளோ
தன்னை வென்றாலவை யாவும் பெறுவது
சத்திய மாகு மென்றே
முன்னை முனிவர் உரைத்த மறைப்பொருள்
முற்ற உணர்ந்த பின்னும்
தன்னை வென்றாளும் திறமை பெறாதிங்கு
தாழ்வுற்று நிற்போமோ?

13

ROORKEE UNIVERSITY*

I am thankful to you Mr Vice-Chancellor for inviting me to deliver this Convocation Address to the Engineering graduates of this year Roorkee University is not new to me. Only a few months ago I was here on an official visit to learn of your academic and extra-curricular activities and to acquaint myself with your problems. It is hardly necessary for me to reiterate what I said then that I was very highly impressed with what I saw here It is well known to you that the seed of Roorkee University was sown in the year 1847 in the form of Thomason Engineering College. The teaching in Thomason College was confined to Civil Engineering only and in this particular field the graduates of the College made no mean contribution to the development of this country In fact it can be said that Thomason College has carved out a niche for itself in the Indian temple of learning. Since its inception Roorkee University has made even greater progress by extending its field to newer activities like Mechanical Engineering, Electrical Engineering at the under graduate level and to the Post-graduate training and research in several highly specialised fields. Its enrolment has risen from 466 in 1954 to 1170 in 1957 and it is expected to go up to 2500 by 1961 For this expansion the University Grants Commission has sanctioned grants of considerably over half a crore of rupees for buildings, *equipment*, staff and loans for the hostels.

With regard to the activities of the University I was glad to read, some time ago in the American journal "Engineering & Science" an interesting article written by a Visiting Professor

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*Delivered at the Convocation on 26th November 1957

from the United States in which he gave a place of pride to Roorkee University I quote a few sentences from this article. The author says 'Take for example, the University of Roorkee where there was inaugurated just last month the first Asian-African Training Centre in Water Resources Development. Engineers from countries all over Asia and Africa are meeting there for a year's time in which they pool their experience and technical knowledge in the management of Water Resources to advance their countries toward total self sufficiency At Roorkee too another experiment is under way called 'Shramdan" which involves the students and staff working together with their hands, using their engineering principles to build structures which will be of service to the campus and the community In this way students and staff have constructed a swimming pool, an open air theatre and a substantial addition to the students' Club Building. Another worth-while programme at Roorkee which deserves mention is that of Refreshers Courses for serving engineers These Courses which run about 3 months each are designed to bring engineers serving in various parts of the Government uptodate on recent developments in engineering." The article concludes by adding that these examples serve to show that "Engineering education in India is dynamically developing its own characteristics of service to the community, the nation and even to the family of nations in Asia and Africa" I need hardly add any more words to the appreciative reference by a foreign specialist.

It is a well-known fact that our expanding economy and rising standard of living require that increasing proportions of our labour forces be devoted to science and technology National science policy must make provision for the initiation and support of measures designed to assure the adequacy of our scientific and technical personnel resources to meet potential needs.

Demands upon the nation's resources of scientific and technical manpower have already developed shortages which in some areas will become critical if the requirements of industry and defence continue to progress at the present rate. In our

effort to maintain steady progress we must give attention not only to training an adequate number of scientists and engineers, but what is of even greater importance, we must lay heavy emphasis on quality The subject of industry s need for young scientists and engineers is one in which India is deeply interested The engineer's creative and productive services are absolutely essential for the continued progress of the country The need today for engineers is almost infinite The country can use as many engineers as it can get, The controlling factor is the rate at which we make progress, and the rate of increase in our standard of living.

Science and technology have undergone a spectacular growth during the past few decades. The progress has out stripped the human imagination Within your lifetime for example, nuclear fission has revolutionized warfare and has served notice that given a chance it will revolutionize our daily lives. In the last 17 years the use of jet and rocket propulsion has increased the speed by which man can conquer distance to twice the speed of sound. Rockets have helped us to explore our atmosphere to a depth of hundreds of miles. We have witnessed the launching of the first gravity-defying man made moon, and since then the second carrying a canine passenger—perhaps the first steps in inter planetary travel. May I divert here to remind you that the scholarly Chief Minister of your State in his convocation address to a similar audience in this University in 1955 while referring to space travel has said "To some of us a journey to the moon may appear to be merely a science *fiction* and *fantasy*" Today as you know it is no more in the realm of either fiction or fantasy The discovery of the use of sulfa drugs penicillin and an ever multiplying variety of antibiotics have tremendously increased our ability to combat disease and now the use of isotopes as tracers has revealed an entirely new means of studying life processes and has already contributed significant fundamental information in the centuries old field of Biology The wide spread use of electronics and automation has advanced so fast that it now seems perfectly reasonable for us to expect man to be freed at last from manual labour

In some countries, like the United States, the expenditure on research and development has increased 4 00 000 times during the period 1900 to 1950 In that industrially advanced country the ratio of persons employed in science and technology to the whole population has gone up from 2% in the beginning of this century to about 25% in 1950 Whereas the total population increased by 32% during 1930-54 the number of engineers during the same period went up by 202% and the number of scientists by 335%. As against 41 000 engineers in 1900, the number in that country doubled in 1910 and increased to 2,86,000 in 1940 and to 6 50 000 in 1954

In India too for the last 10 years increasing attention has been given to the problem of technical manpower As a result we see today some significant advances in this important field The number of technical institutions for Degree Courses has increased from a mere 38 in 1947 to over 68 in 1956 and for Diploma Courses from 53 to 107 in the same period. The annual admissions have increased from 2940 in 1947 to over 5864 in 1956 for the Degree Courses and from 3670 to 9988 for the Diploma Courses Further expansion schemes have recently been sanctioned under which 19 existing Engineering Colleges and 46 existing Polytechnics are being converted into bigger units so as to yield 2538 additional seats for Degree Courses and 4225 additional seats for Diploma Courses. The facilities for post graduate work and research which were practically non-existent in 1947 have been expanded on a large scale and it is expected that by 1961 probably about 1 000 seats will be available for advanced studies in our technical institutions You must be well aware of the fact that the Central Government has made a provision for an amount of Rs. 60 crores to be spent on technological education in the Second Five Year Plan period as against a total provision of 23 crores in the First Five Year Plan

The funds being made available by the Government will add to the physical facilities in the form of buildings and equipment but these cannot by themselves achieve much. The crux of the problem is the teacher of the right calibre and students of the requisite ability Every effort must be made

to attract brilliant young men to the educational career in engineering. With this in view it is planned to create fellowships for promising young men who could be apprenticed to professors and other senior teachers for short periods. In due course these Fellows could take up teaching posts. We must, however realise that India has a tremendous leeway to make up. The ratio of engineering students to total population in India is about 1/10 of what it is in the United States. When we consider that the teacher student ratio in India is perhaps 1/5th of what it is in the States, we get the interesting result that the ratio of the engineering teachers to population in India is about 1/50th of what it is in the States. Thus for India to attain the level that America has reached would *mean expanding her teaching and research staff in engineering* about 50 times or 5000 per cent. This points out to the critical shortage of engineering teachers. The only way by which teachers can be attracted into the profession is to offer them adequate salaries security of service and working conditions at par with those obtainable in India to Civil Services or in private industry To secure this end India should follow the example set in the Western countries where private industry has recognised its obligations to engineering education and has given generous aid in support of research and training.

In this country industry has not shown any keen interest in what goes on in the engineering institutions. It is hardly fair for the industrialists to say that engineers and technicians produced by the Indian universities are not so well up as they would like to have them when industry does not offer the fullest co-operation in facilities for technical training in the proper direction. With proper co-operation between industry and technical institutions, the industries can keep the educational authorities fully informed in advance about their future requirements so that the training courses could be well planned and the institutions concerned could develop flexibility to adapt their courses to the requirements of the industry At present the demand and supply seem to run on parallel lines. On the one hand, the industrialists complain of shortage of skilled personnel on the other technical personnel turned out

by engineering colleges do not find employment Close co-operation between the institutions and the Industrialists is thus an absolute necessity

Progress in science has not always been made so swiftly in the past. A person shocked into a 1000 year coma in 410 A.D upon awakening in 1410 would have had little difficulty in adjusting himself to his new surroundings He would have found that in every important respect, people still lived in the same way that they had been living at the beginning of the 5th century They ate the same food, prepared in the same manner with the same sort of utensils. They lived in the same kind of houses tilled the field and harvested the crops with the same model of oxen and the same implements, and took their produce to market by the same means of transportation. In fact, White-head points out that "In the year 1500 Europe knew less than Archimedes who died in 212 B C.

We might very well enquire how it is that scientific and technological progress, so rapidly achieved in our own times, was so languid in others ? What are the factors that control the speed with which we discover the laws and principles through which nature works and put them to work in the service of man ? Such factors certainly include the political and social climate, availability of materials like metals and their alloys energy and the supply of highly trained professional scientists and engineers.

Science and technology cannot advance in a hostile society This fact was largely responsible for the lack of progress until the 18th century Actually many important discoveries were made before the end of the Dark Ages but almost none of them were applied to the solution of the real problems involved in man's struggle against an unfriendly environment, owing to hostile political and social environment.

Throughout these unproductive years, a small band of inquisitive men goaded by what lay beyond continued to work at the difficult job of expanding the frontiers of knowledge. These men were able to establish the important fact that nature was not capricious and that it could be counted on to operate by certain fixed laws. Further, they demonstrated

that since nature could be relied upon, it need not be feared and could in fact be used to man's advantage in his struggles against it Without this background, this change in concept, the rush of invention that followed the removal of the artificial medieval barriers could not have occurred.

Today the social and political environment is particularly friendly to the scientists and the inventor The engineer and the scientist are no longer considered either as heretics or as harmless tinkerers. They have been granted full professional status and both their services and their products are eagerly sought by industry by the common man and by the Government. To-day therefore, the scientist, the engineer and the inventor have the freedom to create and to market the results of their creation they are respected, they are even the privileged members of our society they can protect the results of their work by just patent laws and they have at their disposal some of the finest laboratories the world has ever seen. A more nearly perfect social and political climate could, therefore, scarcely be imagined.

The second factor governing our progress is the availability of requisite materials The basic information given us by the physicists and the chemists is used by the engineers to produce type-writers, washing machines, air-conditioners giant computers nuclear reactors and guided missiles—all the miraculous inventions that support our technological society To convert basic information into useful machines however the engineer must have materials—wood iron, copper, aluminium, and so forth—with certain specific characteristics. We face stagnation if new and improved materials or methods of using existing materials more effectively are not discovered. Our dwindling supplies of natural metals and minerals are becoming increasingly more difficult and more expensive to refine Already we use casein from milk and the flour from soya beans to manufacture plastics and other materials that often surpass the metals they replace in mechanical, electrical and structural properties. This approach will undoubtedly be exploited much more widely and this exploitation will provide not simply

new materials for our engineers but also new markets for our farm crops

The third requisite *for scientific advance is energy* Until very recently we were pretty much limited to the same sources of energy used by those who pioneered the industrial revolution In effect, we were—and still are for all practical purposes—working on our past savings. For millions of years the energy of the sun was stored in cellulose plants Through the chemistry of nature this energy was converted into what we call the fossil fuels —coal and oil. Gradually we learned how to use this energy, first by crude wasteful direct methods and later by increasingly refined and subtle ones. However we have been *using up our supplies* of the fossil fuels at a fearful rate and face the prospect of total exhaustion within a relatively short time

Only recently however we learned how to split certain atoms and to collect a part of the energy released in the process. Almost the same time, we learned how to put certain other atoms together to gain by fusion some additional energy This is the first important new source of energy The potential power residing in uranium for example is staggering. One pound of fissionable fuel contains about 10 million kilowatt-hours of energy the equivalent of over two and a half million pounds of coal. But how are we going to extract the power from such a fantastically concentrated source ? Where do we find the materials to withstand the terrific heat necessary to extract this power efficiently ? How do we keep the very machinery necessary for extracting the power from contaminating the reactor ? A multitude of problems must be solved before atomic power can be enlisted constructively in the service of man.

Actually most of the problems connected with practical atomic power arise from the cumbersome, round about method we are forced to use in extracting it First we split an atom a process involving moving electrical particles, and then we collect the heat produced and use it to boil water to get steam to turn a turbine that turns a generator to produce electricity Fame and who discovers how to

short-circuit this complicated, inefficient process by producing electricity directly from nuclear fission. We don t know how to do this yet but we will know it one day

Eventually we will learn how to use the energy from the sun more efficiently Down through history we have all but ignored this spectacular source of energy using it only to grow plants for food building materials, and fuel. But nature s methods are inefficient we realize only about one per cent of the solar energy required to grow our most efficient crop—a field of sugar-cane The sun s energy is too important to ignore in this way A square metre of the Rajputana desert during summer time receives approximately one horse-power in the middle of the day Bright sunlight deposits each day on the roof of an average house enough heat to do the work of about 50 killowatt hours of electricity 145 pounds of coal, or 14 gallons of gasoline. Today several methods of constructing a solar battery which may convert energy from the sun directly into electricity through a process known as photo-electricity are being developed Solar batteries may be the solution. Certainly, there must be an efficient method of tapping this vast amount of wasted energy—and one day in the next few years some young scientist is going to find what it is.

The fourth leg on which our industrial progress rests is manpower Modern facilities, instrumentation and scientific equipment are necessary in today s research establishment but it is man who makes discoveries and performs experiments. It is fairly obvious that manpower is needed for manual assistance we need it now and probably shall always need it. The more important form of manpower however—the type of brainpower without which our civilization can no longer exist—is the scientists and the engineers who understand the laws of nature and have the ability and initiative to convert these laws into things that people want. It is this last type of manpower—the scientists and the engineers—that is in short supply today We simply cannot get enough scientists and engineers to support the sort of civilization we have made for ourselves.

"Our technological team (the scientist the engineer and the engineering technician) is our most valuable natural resource—our best hope for success in a hot or cold war and our prime source of progress in peace" The chief source of this technological team is a technical institute like the Roorkee University We are living in a world built on science engineering, and mathematics Our children must be equipped to understand this world. They must have a chance to decide if they want to become productive members of our technological team.

But the most difficult and fundamental of all questions relating to the education of engineers is the type of training which should be given in an engineering institution In recent years people interested in education have been almost unanimous in urging the universities to concentrate on principles, not to bother about specialised knowledge and techniques, but rather to aim at producing a man having a real understanding of the fundamentals and sufficient mental flexibility to pick up quickly any specialised scheme which may be necessary for one particular job The other aspect of education which we have to keep in mind is that the engineer has to take many decisions which have economic sociological and moral implications For example the Indian Railways have in hand a great modernisation programme They have to decide on how many lines they shall run electric trains and how many with diesel locomotives besides, the ordinary steam locomotives. At first sight, this may be a straightforward engineering decision but what are the background questions involved ? Is it likely that in the future the supply of oil fuel in this country will be much worse or much better than it is now ? How much is it worth sacrificing for somewhat cleaner atmosphere which the electric railways give ? Such questions could be multiplied almost indefinitely The decisions taken will have several repercussions. Every time we introduce, or fail to introduce, a new machine or a new process into industry we start a chain reaction which affects not only those directly concerned—the management, the workers, the customers—but, in widening circles, every department of national life.

The big question, therefore, is this Is the engineer however well trained within his comparatively narrow field capable of making these decisions sensibly? The question therefore arises, should we have much wider coverage—including economics, sociology and philosophy if the would-be engineer is to be capable of appreciating and taking into account the implications of the decisions he is called upon to make. Some universities in foreign countries particularly in America are experimenting in courses which combine Science Technology and Human Studies.

In this connection two articles which appeared recently in the Universities Quarterly are of interest. While the authors of both the articles N R Hanson of Cambridge and John Pilley of Edinburgh, do not disagree about the need to temper technological with liberal education, Hanson is of the view that the study of technology can itself be so conducted that the aim of a liberal education might be served to some extent by technological education He wants us to give up our traditional methods of technological education which he insists do not produce educated men In its place may be adopted a plan of technological education which would include, with every technological speciality the history and philosophy of the speciality as well as cognate subjects of a more economic, political, and psychological variety This plan, he tells us, would produce technologists with a deep understanding of special disciplines in a broader context of related disciplines.

John Pilley however seems to think that the 'humanisation of the technologist is too serious a matter to be left to the practice of such a theory He makes two suggestions in this connection. First, in school humanistic studies should be carried right through to the end of the school years for those who are to specialise in science as well as for others and that at the university there should still be some humane study included in the scientist s work. Second a teacher of technology should be a person who has carried his humane studies a good deal further than is possible for those who become professional technologists

These are suggestions over which educationists concerned with technological education might ponder with profit. Per sonally I am inclined to agree with Hanson. While we may well include some humane studies in the curricula for school education with a view to providing a common base on which differing structures of post school specialisation or training might be built, I doubt if within the period of 3 or 4 years usually set apart for the professional education time could be found to make a technologist also somewhat a philosopher a psychologist or an economist. The whole life-time is open to cultural and social education. I have met many scientists and technologists who are deeply aware of cultural needs and social responsibilities, although their formal education did not provide for any special instruction in these

Some of the new graduates, while looking forward to enter the professional field might be facing the question whether the last few years of college education were enough for them to obtain proper technical knowledge to become a successful engineer It is my view that the college education is a minimum requirement which gives you necessary confidence to enter your future career A few years in college cannot guarantee success in a profession It is what you learn after wards and how you apply it that is important. I therefore hope that your education in engineering will continue hereafter even when you have achieved success in the profession you select to enter May I remind you that it is in the tradition of science first to observe, then to understand, and finally to utilize the forces of nature. Man has been doing this since the dawn of history but at one time discoveries were made in a "hit or miss manner by lone investigators poorly supplied with information and equipment The world has now learned to bring trained scientists and engineers together in well-equipped laboratories to make discoveries and develop new ideas. This is an important new conception in our modern economy which has resulted in greatly accelerated technological progress Organised research has already given much and offers more for the future. In addition to the nation s natural resources of farm mine and forests, industrial research constitutes a

form of national resource. The fruits of scientific investiga tions are usually facts and data which when applied by the design engineer result in products of higher quality, increased durability and better value to the user

To day we have perhaps the most nearly perfect social and political climate possible for encouraging the growth of science and engineering. We enjoy almost complete individual freedom We have an excellent system for guaranteeing an inventor a just return on his invention. Our society honours our engineers and scientists and provides them abundantly with funds facilities and opportunities. We are discovering new ways of getting more out of old materials and of devising new materials when we need them. The world has only recently discovered a vast, tremendously powerful source of energy the full potential of which we can scarcely even imagine If anything is to hold up our industrial progress it will not be an unfriendly climate, a lack of proper materials, or an inade quate source of energy It will be a shortage of bright young men and women with the capacity for developing new ideas and the desire to do so

To the young graduates sitting before me I wish a successful career and a bright future I would like to repeat to them what Prof Pavlov the great Russian physiologist said in a request to the young scientists of his country

"What can I wish to the youth of my country who devote themselves to science ?

Firstly gradualness From the very beginning of work, school yourselves to serve gradualness in the accumulation of knowledge

Learn the ABC of science before you try to ascend to its summit Never begin the subsequent without mastering the preceding.

School yourselves to demureness and patience. Learn to inure yourselves to drudgery in science Learn compare collect the facts.

Perfect as is the wing of a bird, it never could raise the bird up without resting on air Facts are the air of a scientist.

Without them you never can fly Without them your "theories" are vain efforts.

But learning, experimenting, observing, try not to stay on the surface of the facts. Try to penetrate to the secret of their occurrence, persistently search for the laws which govern them.

Secondly modesty Never think that you already know all. However highly you are appraised, always have the courage to say of yourself—I am ignorant.

Do not allow haughtiness to take you in possession Due to that you will be obstinate where it is necessary to agree, you will refuse useful advice and friendly help, you will lose the standard of objectiveness.

Thirdly passion Remember that science demands from a man all his life. If you had two lives that would be not enough for you. Be passionate in your work and your search ings"

These fine words are as much addressed to the engineers as to the scientists. Besides the competence of scientists, technologists and engineers should have the ethics too of a real scientist. Engineers as architects of human happiness should eschew anything that is mean or dishonest in their professional careers I firmly believe that our engineers, if they would seriously apply themselves to the problem, could bring about a saving of 20% in the cost of construction. The lay person is helpless in this respect and it is for the engineer himself to fight against some of the past unethical practices, which are being eradicated all too slowly I hope the young engineers who are looking forward to the new careers will dedicate themselves to the service of the country and the community and will tread the straight path of honesty and proper mode of conduct in all professional matters

Let the words of Mahatma Gandhi ring for ever in their ears

"I know the path. It is straight and narrow It is like the edge of a sword. I rejoice to walk on it. I weep when I slip."

God s word is
He who strives never perishes

I have implicit faith in that promise. Here is a Sanskrit rendering of this for easier remembrance

Aham margabhijno bhavati sa rijuh kinch-tanurapyaser dharaiveyam samudamahamasyam hitapadah—Skhalan rodimyaitham vachanamidamashwasayati mam—Kadachinnashyen na charita dridhyatno mavitatham"

अहं मार्गाभिज्ञो भवति स ऋजुः किंच
तनुरप्यसेर्धारैवेयं समुदमहमस्यां हितपद ।
स्खलन् रोदिम्यैतं वचनमिदमाश्वासयति मां
कदाचिन्नश्येन्नाचरितदृढयत्नो ऽवितथम् ॥

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14

DELHI UNIVERSITY*

I am grateful to you Mr Vice-Chancellor for having invited me to address this Convocation In ordinary circumstances I should have excused myself in view of the numerous occasions this year on which I have already addressed university convocations. I should have explained my difficulty to you and would have expected you to say what Kautsa, the disciple of Varatantu said to King Raghu when in search of the where withal to pay his irate teacher he approached the King, only to find that he had distributed the last vestiges of his kingly treasures in the sacrifice he celebrated following his conquest of the world. You will recall that this is what Kautsa said—

स्वस्त्यस्तु ते निर्गलिताम्बुगर्भं
शरद्‌घनं नार्दति चातकोऽपि[1] ।

(Farewell ; Not even the Chataka will harass by his importunity the autumnal cloud which has fully shed its content of rain).

But there were important reasons why I agreed immediately one is that this is the first time that I am being asked to address the Convocation of a Central university and the Central universities are so far as maintenance is concerned also the responsibility of the University Grants Commission as the agents of the Central Government, the other is that you Mr Vice-Chancellor have not long ago assumed charge of your new office and have already initiated imaginatively and with great verve and *elan* a series of measures for the development of the University measures which have the additional merit of not for the time being threatening to make an immediate draft on the financial resources available to the University I shall have occasion to say a few things, therefore, in

* Delivered at the 35th Convocation on 30th November 1957

1 Kalidasa's Raghuvamsam, 5th Sarga.

the course of my address in regard to Central universities as well as in regard to what is expected of universities in general and their teachers and students.

It is symptomatic of the pace at which the scientific and technological revolution is taking place in the world to-day that there is a spate of writing and discussion in regard to the purposes and policies appropriate to a modern university All history is in a sense adaptation of mankind to the changing circumstances of human existence and what is true of the history of all nations is also within their own sphere true of universities. As someone has observed the ivory tower is a thing of the past and to-day universities are very much part of the society to which they belong, although not necessarily or immediately involved in the day to day affairs of that society No one taking a conspectus of the progress of mankind from the time evidence is available in regard to the emergence of man, at least 600 000 years ago will fail to notice that the last three hundred years are markedly different in their characteristics from all the preceding period of hundreds of thousands of years. It is as if mankind having progressed along a low plateau all the time has suddenly begun to rise almost perpendicularly Astonishing as the achievements of mankind had been in technology they pale into insignificance when compared with the scientific marvels of the present age, which will be known as the threshold of atomic power fuels of inconceivable potency and space travel for living beings. Within the last three hundred years there have been not only the scientific achievements of man, but also his triumphs and failures in the art of living The French and the Russian Revolutions have changed the dimensions of man s political life, while the Industrial Revolution has altered the circumstances and environment of sociological life beyond recognition. What is more noteworthy is that during the last fifty years, while man s material advance has almost assumed a perpendicular direction there have been world wars and destruction of life and property on a scale that could not be imagined by all the wars and destruction of the past. It is against this background that much of the current

discussion in regard to the purpose of a university is taking place.

In the United States of America those most competent to judge educational trends are not at all certain that the universities of that country are fully discharging the essential purpose of a university namely to see that every citizen is as good and wise as possible and that he achieves the fullest development of his intellectual powers It looks to them as if the end result is no longer education, not even instruction but merely accommodation of the invading tide of numbers. They urge that education be regarded essentially as the means of cultivating goodness and wisdom, qualities which are on analysis found to be inseparable, of learning how to lead a good life, based on good acts and good habits, and well founded in the intellectual grasp of the aims of life and the means of achieving them William Clyde De Vane in his book American University in 20th Century calls the universities the brains, the heart and the conscience of society and points out how the demands upon them are far ahead of the nation s social development, both in quantity and quality Liberal education is, according to him, the base upon which young people may specialize. The universities have to discharge their functions in a society that is pragmatic, opportunistic, materialistic and fundamentally anti-intellectual. Moreover he observes that Government and industry draw off from the universities by their greater material rewards the great teachers and men of ideas, impoverishing not only instruction but also seminal, pure and disinterested research. Demands are often made on universities which are injudicious and ill-considered (e g physical education hotel management journalism etc.). But he is of the view that the universities should confine themselves and their activities to the conduct of schools and departments where training of the intellect is the most important aspect. To command admiration rather than popularity should be their aim. Where should our service to the nation cease ? Rather phrase the question differently and ask what the universities can do that no other institution can do things that will not be done unless the universities do them. These are the matters of the intellect

—the true higher learning." According to him, and I agree with him, the university has a larger and more important task than merely being immediate servant of society—apart but concerned, severe but friendly critic of contemporary society, raising its intellectual tone, the arbiter of public taste, calling attention to reason and principle, keeping the culture of the nation in balance reminding people of their history, their ancient ideals of freedom and justice, and to guard their spiritual state They must eschew ambition greed, lust of power, vanity, complacency and the wish too eagerly to please as combines of scholars and finest representatives of culture in all its reasonable and altruistic aspects.

De Vane goes on to say that to be effective, universities must be a community and have a corporate spirit, of a size not too large to prohibit cohesion and cooperation, and suitably located—not much in the midst of the madding crowd, but not too far either so as to be threatened by intellectual anemia. They should avoid parochialism of teacher and scholar composition. The optimum size—not dictated by material benefits and standardization and conformity—should be seven to eight thousand in all in a university established on the edge of a middle sized city not too far removed from the main contemporary currents of thought and culture.

No doubt there will be on the university the changing demands of society arising from the breadth-taking unfolding of the industrial and scientific revolution and the working of the democratic process. They should not therefore merely be a repository of learning not merely a perpetuator of it either but should be creating new knowledge for the preservation and advancement of the nation and the health and sanity of its culture.

I shall now indicate the thinking on the subject in the United Kingdom and shall refer to Sir Walter Moberly's book "The Crisis in the University" which is now nearly eight years old, having been first published at about the same time that the Report of our University Education Commission was made Sir Walter is well known as a very effective Chairman of the University Grants Committee of the United Kingdom, which is

admittedly the prototype for the University Grants Commission. In the closing chapter of his book entitled 'Taking Stock'' Sir Walter makes the following points—

(1) We are living in an age of exceptional crisis, with a pace of the development of discovery and invention such as could not have been even imagined fifty or hundred years ago. Power has been doubled and quardrupled almost overnight; but the technique of manipulating men has been developed quite disproportionately to any growth in real understanding of their nature or their good

(2) The issue depends chiefly on the human factor since in the last resort economic and political orders—and revolutions—depend on the beliefs and sentiments of men not necessarily on those which they profess and suppose themselves to hold, but on those which really move them.

(3) The beliefs which govern men's action are in flux. The old communal convictions concerning good and evil have broken up. A deep uncertainty about goals and obligations pervades all classes and all levels of culture. Our society has lost direction.

(4) If a clue to reconstruction is to be found within our own tradition *i e* not by abandoning but by re discovering and reinvigorating it, flaws in the tradi tions must be corrected and the social embodiment of religion re-examined. Care should be taken to preserve the vital element in religious tradition.

(5) Thus our generation is confronted with a stupendous intellectual task namely relating tradition to and ex pressing it in terms of large scale mechanical civilization. In such intellectual reconstruction a heavy responsibility rests on the universities as the chief organs of community for sifting and transmit ting ideas.

Examining the manner in which the British universities were able and willing to respond to this challenge Sir Walter noted that they were in a state of rapid expansion and develop-

Socialistic construction. All university students in China irrespective of the Faculty to which they belong have compulsorily to study (i) History of Chinese Revolution, (ii) Political Science and Economics and (iii) Marxism and Leninism. Dialectical materialism is taught in the higher educational institutions which operate a five year system such as colleges of technology, agriculture economics etc.

As regards the U.S.S.R. on whose system of higher education the system in all other countries with a totalitarian regime is presumably based, it would appear from press reports as if on account of recent events in the peripherial countries far-reaching changes are being made in the methods of enrolment. A Moscow report published early this month stated that the Soviet universities this autumn have been filled with young men and women who look older than usual and who know more about lathes, tractors and tools than about academic life. These are "worker-students" typical of the changes introduced that year. These men have worked for two or three years at the factory bench or in agriculture and have now been given priority admission to Soviet universities, colleges and polytechnical institutes, all their tuition fees being met by the State in addition to a modest allowance for food, clothing and lodgings. This significant move appears to have the effect of "throwing away the cobwebs of mere book learning" and placing higher education side by side with production on problems of industry and concrete political tasks in the struggle to build Communism". In other words, [illegible] are as important, if not more so, than [illegible] qualifications. According to the Soviet press, the [illegible] student who did "not disgrace" [illegible] [illegible]

art of living ?" especially to students who must earn their living, Sir Walter indicates four conditions to be fulfilled —

(i) The present isolation of subjects and of departments must be broken down.

(ii) The overloading of curricula must be corrected

(iii) For members of the staff a new balance between teaching and research must be found, with particular attention to establishing real contact between teachers and pupils

(iv) Customary methods of teaching and testing must be reconsidered

Sir Walter goes on to make the important point that universities must not be satisfied simply to reflect the world or to be a subordinate mechanism in the cultural organisation of the State It has its own values to maintain and its own standards demanding allegiance Its worth to the world depends on its maintaining the liberty of prophesying, if need be in the teeth of the world Its peculiar virtue imperatively requires for it a high degree of autonomy But autonomy must be combined with responsibility and a balance must be preserved between the State and the university

We may compare and contrast these trends of thought with what is reported to be happening in the Peoples' Socialist Republic of China and in the U.S.S R. In China the aim of the universities is frankly to turn out the educated, scientific and technological personnel required for the various purposes of the State and every care is taken to ensure that young persons studying at the universities are well grounded in the basic tenets of Communist philosophy It is reported that when student discontent in some places seemed to indicate a tendency on the part of the students to indulge in free intellectual activity steps were promptly taken to suppress such deviation. The aim of higher education in China is, then, to train high level and specialized personnel for construction, personnel who have an understanding of the fundamental theories of Marxism and Leninism, as well as possess an understanding of the latest scientific and technical knowledge, besides the possession of strong and healthy physique and the will to serve the cause of

Socialistic construction. All university students in China irrespective of the Faculty to which they belong have compulsorily to study (i) History of Chinese Revolution, (ii) Political Science and Economics and (iii) Marxism and Leninism. Dialectical materialism is taught in the higher educational institutions which operate a five year system such as colleges of technology, agriculture economics etc.

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vodka and dancing instead of studies Their attitude to Communism if not "cynical" at least was "weak and wavering" According to the press report the events in Hungary in the autumn of 1956 served to crystallize the Soviet attitude towards this type of students and focussed the anger of authority at the "alien and unhealthy moods" in the student body and at the failure of many learned men on the university staff to explain to the student body the "complicated phenomena" of international life at that juncture There were countrywide discussions, and a foreman in Leningrad got up and asked "If a fellow does not fulfil his norm in our factory we demand an answer from him Why is it people in colleges who study poorly are left unmolested ?"

It is time now to turn to Indian universities, their problems and their special task. I have drawn heavily on what competent and experienced academicians have said on the subject e g on J R. Macphail s booklet "The future of the Indian University' University men agree that there is a special task that is imposed on universities in India in common with, but more so than, universities in Asia, *viz.*, that of playing a vital role in the ideological conflict that is in progress in the world, by ideas and values that can be tested and assessed. In particular this involves (1) an examination of the concept of man as a rational being the assumption that reason is infallible and science valid in every sphere of life and in the light of contemporary historical experience (2) responsibility for the preservation of intellectual freedom by the university community of learning, searching for truth without surrendering to dogma (3) responsibility for preserving autonomy in academic matters while supporting all democratic values upheld by the State (4) responsibility for fostering the sense of community while accepting the challenge of individualism and modern collectivism (5) in the social sense by providing the new national leadership required for developing the State as a moral community in which the worth of human personality is recognized and respected (6) in the political sense by examining the problem of the class struggle, involving a study of the concepts of work vocation and the dignity of labour leading to the formulation

of a philosophy of social action and suggestions for resolving class conflict without sacrificing social justice or surrendering to methods which do violence to human personality

The main problem for a university then against the back ground of these discussions, is to define its responsibility to society not merely the utilitarian ends of the individual that is training or qualifying for the employment market nor the ordained needs of the State. "The State is the instrument of society's will only", while the university must be the mind and conscience of society When the State does not fully represent the entire society the demands made by the State and the society naturally differ The university must be able to reject some of the demands of the State and to take up others of the society even at the cost of a contradiction from the State—hence is derived the concept of autonomy In concrete terms the discharge of these functions will involve maintaining a balance between technology and humanity remembering all the time that the person matters and that the goal is the development of a personal community One may recall here the observation of Bertrand Russell that the pursuit of personal excellence is as important as the performance of public duty

It is time now to ask ourselves whether Indian universities in general, Central universities especially and Delhi University in particular answer to the ideal sketched out above It would be rash on my part to pronounce a judgment in general terms on Indian universities, although by now I have visited intensively nearly thirty of them. I must reserve pronouncement of a verdict, if that is ever to be to some future occasion. All I would content myself with saying here is that I noticed on the part of most of my Vice-Chancellor friends a genuine desire to mould the affairs of the universities in their charge according to the accepted ideal, but that their efforts are not always supported by the teachers or actively encouraged by the State or appreciated by the student body with a full consciousness of their respective responsibilities. The reasons appear to be apart from the dominating one of lack of financial resources, apathy or even scarcely veiled hostility on the part of the State Government as a result of differing interpretation of university

autonomy so far as States are concerned a lack of con scientious interpretation of their responsibility by bodies of teachers, a significant proportion of whom are dispirited by the conditions in which they are called upon to work so far as the staff is concerned and growing dilution of the quality and previous preparation of the bodies of students, many of them immature in mind and body, that flock into colleges and universities. It is not as if any great disastrously abrupt decline is taking place rather there is an almost imperceptible loss of standards and quality and deterioration of graces and manners. It is difficult to form any quantitative estimates in the absence of a thorough-going statistical survey but sufficient qualitative material comes to the notice of a concerned observer to make him very anxious indeed about the future of Indian universities, reports of political minded governing bodies, unwarranted interference by State authorities, pacts formed by teacher politicians and irresponsible mis-guidance by student leaders, often of an age too mature to warrant their continuance in the universities—the Law Faculty seems to be the special asylum of many of these—and a general listlessness and fecklessness generated by the lure of urban life and a discouraging climate for suitable employment for the educated. Student leaders have confessed to me that no serious study is attempted by quite a significant percentage of students except during the two or three months preceding the university examination, when reliance is solely placed on the cram-literature that is plentifully available in the market. One student, said a Vice-Chancellor to me frankly told him that he wanted to read for his M.A. in order to become a leader indicating the false lure of political career as pursued in the country to-day

So far as the Central universities are concerned, two of these may be said gamely to be struggling with the problem of amelioration out of conditions in the past which were not altogether satisfactory Another and the biggest of them all appears to have been reduced to a parlous plight by teacher politicians, who appear to have made a speciality of inciting the student body to challenge the decisions of authority by

hunger strikes and other such thoroughly unworthy and unjustifiable means

Against this somewhat sombre background, it is a pleasure to be able to state that from all accounts and by all signs the Delhi University is doing reasonably well On the academic side although relatively young yet, it appears to have made a name for itself by the high standard of its faculty and the successful way in which it has organised the Three Years Degree Course The teaching staff would seem to be in good fettle on account of the care taken during the period of the Vice-Chancellorship of Sir Maurice Gwyer to assure them security of tenure and dignity Report of disagreement not so much on the staff side as on the dis staff side occasionally appear in the papers, but most of these storms appear to end without having caused serious damage to the administration or reputation of the University I take this opportunity therefore, of paying my tribute to all those who have contributed or are contributing to this encouraging state of affairs

It is my firm belief that in the other universities of India also such happy developments are possible, and that, although adequate finance is important for the process of amelioration, each and every improvement need not wait for finance All teachers are not incompetent and frustrated and the profession still seems to attract conscientious men who find happiness in their chosen vocation. But their ranks will be reinforced and their spirits raised if their conditions of service status and prestige could be improved The impact of the teacher on the student is still the key to good education and the keen competent teacher can still command the attention of students, how ever non-serious they may be

As regards the students, there is much that one could say but I must reserve my remarks to some future occasion and to some other place, when and where they might be needed more and might be more telling.

I have to remind myself that this is an occasion especially meant for the new graduates. First of all I must extend to all of them my felicitations on completing an important stage of their higher education, with a pat on the back to those that

have won distinctions. A good many will no doubt proceed with their studies, and what I have stated earlier in regard to the purpose of universities will, I hope, be considered by them as worthy of rumination whilst they go through the rest of their university career As the adage has it one can only take the horse to the water It is for him to drink or not. All I can add is that in the present case the water is eminently potable and that if imbibed it will refresh and invigorate.

To those that pass out and commence their encounter with life and its realities and challenges I wish faith and fortitude, faith in the good and wise life and fortitude in the face of disappointments Equipped with these they can move mountains and play a worthy role in the building up of our nation. Above all they must continually ask themselves of what "inward and spiritual graces their gown and hood are the outward and visible sign By graces of life one means the sort of virtues in the rich and the poor that the following passage from Kalidasa s Raghuvamsham illustrates. It occurs in the fifth Sarga of that famous work from which I have already quoted in the beginning of my Address.

King Raghu had given away in royal charities the last vestiges of his treasures, when Kautsa, the disciple of Varatantu approached him in the hope of collecting the tuition fees that his teacher demanded Teachers in those days did not always charge for their tuition and Varatantu had made no charge regarding the disciple s assiduous devotion as ample recompense But Kautsa insisted on payment and the angered teacher demanded 14 crores for the 14 disciplines he had taught him Kautsa was about to depart, with the farewell I have quoted but King Raghu would not allow a learned person to go un satisfied to another more generous donor and prepared to invade Kubera, the God of wealth to obtain the required riches. Before he could start, however lo and behold ! the treasure house had been filled overnight by Kubera not anxious to try conclusions with the redoubtable Raghu who had conquered the world Raghu offered all that mass of gleaming gold to Kautsa, the value of which was far in excess of the required

14 crores. Then follows the scene worth immortalizing in letters of gold, says the poet:

जनस्य साकेतनिवासिनस्तौ द्वावप्यभूतामभिनन्द्यसत्त्वौ ।
गुरुप्रदेयाधिकनिःस्पृहोऽर्थी नृपोऽर्थिकामादधिकप्रदश्च ॥

(The residents of Ayodhya did not know whom to admire more—the suitor who would not take more than just what he needed to pay his teacher or the King who offered in excess of the amount sought.)

There is many a value lesson that we may draw from this incident. The King who distributed all his wealth to the point of penury after a world conquest, who would not allow a learned man in need to go away unsatisfied, who prized his own reputation as a giver almost fanatically and gave away again all that his prestige procured for him; on the other side, the selfless but irascible teacher, the devoted pupil anxious not to exploit his teacher's kindness and finally the learned person's disinterestedness in wealth in excess of what was needed. The legendary days of Raghu are buried in the twilight of prehistory. But the essential human values of generosity, sense of duty of the highly placed, the teacher's labour of love, the pupil's regard and reverence for the teacher, the disinterestedness of king and suitor in material wealth not needed for the discharge of one's responsibilities—all these values are as valid and relevant to-day as they were in Bharata some 4,000 years ago.

16

SRI AUROBINDO RELICS ENSHRINEMENT*

IT is with a deep sense of humility and a consciousness of many shortcomings that I enter upon the solemn and exalted duty that has been entrusted to me the installation of the relics My acquaintance with the early life and work of Sri Aurobindo dates from my school days when under the inspiration of a serious and patriotic teacher I learnt to appreciate and revere the endeavours of Sri Aurobindo to stimulate the thoughts of his countrymen towards the realization of complete independence near the end of the first decade of this century With his writings on the culture of India and the spiritual life I cannot claim to have any deep familiarity and it was not till about three years ago that, accompanied by my wife Srimati Durga bai Deshmukh I had the good fortune to visit the Pondicherry Ashram—alas ! after the attainment of Samadhi by Sri Aurobindo. We paid our homage to his Samadhi and were privileged *to pay our deep respects to the Mother* and through her kindness were enabled to obtain some idea of the aims and purposes of the Ashram and the main features of the life of the Ashram.

We returned greatly impressed and stimulated and decided to take an early opportunity of revisiting the Ashram. Illness and other difficulties interfered with our plans and it was not till last October that we were able to visit the Ashram again and drink in once more its unique atmosphere It was here that the Mother conveyed her wish to me that I should preside over the installation of the relics in Delhi on the 5th December the date on which Sri Aurobindo attained his Samadhi in 1950 I agreed, although aware of my relative unworthiness for this responsible

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*Address delivered at the Relics Enshrinement Celebrations on 5th December 1957 at Delhi.

assignment, because I felt that I might at least to some extent be instrumental by so doing in spreading a realization of the significance of the message of Sri Aurobindo

Centres where Sri Aurobindo s work has been studied are in existence in many parts of the world and the centre for this work has existed in Delhi since 1949 but it was only last year that a regular branch of the Pondicherry Ashram was opened in Delhi and as part of it, a school pursuing the ideal of integral education was started I believe that this may be regarded as a new phase in the dissemination of the message of Sri Aurobindo and that it is the hope of the Mother and the residents of the Pondicherry Ashram that similar regular branches of the Ashram will in due course be multiplied so that the essential purpose of the Ashram might be attained on a steadily widening field in this world

There is a misapprehension, which has been unconsciously fostered by the quiet work that goes on at the Pondicherry Ashram, that the Sadhaka who is endeavouring to follow Sri Aurobindo s teachings is indifferent to whether humanity may benefit from his efforts or not. The installation of this Samadhi is the loving answer removing any such misapprehension. Its installation has been undertaken only after an appropriate preparation which has been judged to be adequate by the Mother Sri Aurobindo taught that humanity is not the highest God head, that God is more than humanity but that in humanity too we have to find and serve Him. He held that the erring race of human beings dream always of perfecting their environment by the machinery of government and society; but that it is only by the perfecting of the soul within that the outer environment can be perfected He deprecated the all-too-ready desire of man to help others" and insisted that the Sadhaka must do and speak himself the right thing from his inner poise and leave the help to come to others from the Divine.

Dr Indra Sen wrote to me a few days ago that the Mother felt happy that I had agreed to preside over this installation of the relics of Sri Aurobindo because she felt that I had the necessary sincerity and integrity that was required of any one who sympathized with the cause of the dissemination of Sri

Aurobindo's teachings. In the observations that I shall make in the short time that is available to me I shall endeavour not to disappoint those who have appointed me for this solemn ceremony

The Pondicherry Ashram has placed at my disposal a fairly full collection of books and literature relating to the life and teachings of Sri Aurobindo. So many devoted and com petent men, blessed with spiritual insight and a capacity for philosophic thought and expression have written about the life and teachings of Sri Aurobindo that nothing that I could say here could lay claim to originality and if I were to make acknowledgements they would be too numerous to be accommodated within the scope of this short address.

I feel it necessary that I should introduce my remarks with a short sketch of the life and teachings of Sri Aurobindo, gleaned from all the writings that I have just referred to

Sri Aurobindo was born in Calcutta on the 15th of August 1872, a date which, by a coincidence which must have some significance, marked the beginning of the independence of India an ideal for which Sri Aurobindo struggled hard until he retired from politics in 1910. Sri Aurobindo s early education was purely English, in the course of which he received a thorough grounding in Greek and Latin and laid the foun dation for his scholarship in Classics, besides developing love for English and French literature and for history During this period he also picked up a good knowledge of Italian and German and his poetic temperament led him to compose poems in English. At Cambridge in 1889 he won all the prizes in King's College in one year for Greek and Latin proficiency, passed the first part of the classical Tripos examination in the first class, but did not take the second part. In the following year he passed the open competition for the Indian Civil Service examination but manoeuvred to fail in the riding test because by that time he was animated by a burning sense of patriotism. The next three years saw him as a rebel against the moderate politics of the Indian leaders of the time and he even attempted the organisation of a secret society for over throwing the foreign rule in India. An introduction to the

Gaikwar of Baroda by James Cotton, brother of that great friend of India, Sir Henry Cotton secured Sri Aurobindo a promising position in the Baroda State Service.

Disqualified for the Indian Civil Service Sri Aurobindo, who had mastered Greek Latin, English and French and had acquired sufficient knowledge of German and Italian felt that he was de nationalised by his culture and foreign tastes and tendencies, but his wide learning enabled him to have a glimpse of the real condition of his country which he was one day destined to re nationalise.

The thirteen years, from 1893 to 1906 filled Sri Aurobindo a life with varied service experience including teaching. They were also years of much literary activity and considerable self culture Much of the poetry afterwards published from Pondicherry was written at this time It was at Baroda that he made up for his deficiency of oriental and Indian languages especially Marathi and Gujerati the two official languages of the State He also learnt Bengali mostly by himself

Among Sri Aurobindo s intimate friends at Baroda was Madhavrao Jadhav with whom he lived for most of the time he was there. It was here that he came to be acquainted with *spiritual* work through *the sayings of Ramakrishna and the* writings and speeches of Vivekananda for whom he developed an immense admiration. He took little interest in Philosophy and Metaphysics although one of his Cambridge friends, K. G Deshpande who was a Sadhaka asked him to take to the practice of Yoga an idea which he dismissed, as it seemed to him a retreat from life.

It was while in Baroda that Sri Aurobindo began to take stock of the educational conditions and political situation in India and started contributing annonymously at the instance of his friend, K.G Deshpande, to the "Indu Prakash" a series *of out spoken articles under the challenging caption* "New Lamps for Old" In these articles he gave vent to his dissatisfaction at the manner in which the Indian National Congress, then about ten years old, was conducting its activities. These bold articles made a *sensation in political circles and* scared Mahadev Gobind Ranade and other leaders of the time

at whose instance Sri Aurobindo was requested to moderate his tone A greater part of the last years of his Baroda Service was spent by Sri Aurobindo in behind-the-scenes political activity The outbreak of the agitation against the partition of Bengal in 1905 finally led him to resign from the Baroda Service and he openly joined the political movement. In 1906 he came to Calcutta as the Principal of the newly founded National College. This was, as it proved to be, a turning point in his career

In Calcutta Sri Aurobindo plunged himself heart and soul into the movement to annul the partition of Bengal and to liberate his country Along with the Bengalee-Maratha journalist Sakkaram Ganesh Deuskar author of the Desher Katha" and Brahmabandhav Upadhyaya, Editor of the *Sandhya* Sri Aurobindo started a programme with the object of attaining Swaraj through boycott and swadeshi. To him Swaraj meant complete independence and not merely self government within the British Empire. Along with Bipin Chandra Pal Chittaranjan Das, Aswini Kumar Dutta and Rabindranath Tagore he held out before the country a constructive programme of nationalism which was animated by the supreme mantra of Bandemataram" as depicted by Bankim Chandra Chatterji in Ananda Math."

Soon Sri Aurobindo found himself at the head of the progressive nationalists in Bengal. He was the real power behind the *Bandemataram* the journal of the Nationalist Party which in a short time became the spear head of the nationalist movement in Bengal It was through this journal that Sri Aurobindo pointed out the hollowness of the Minto-Morley reforms and enunciated the idea of passive resistance as an instrument of political action.

Sri Aurobindo did not rule out violence in all circumstances and was acquainted with the working of certain secret societies in Western and Eastern India. Of these societies the *Yugantar* group in Bengal became closely associated with his activities, and in August 1907 Sri Aurobindo was actually taken into police custody for having published certain articles in the *Bandemataram*, which were previously published in the society s

journal the *Yugantar* The strength of character and courage shown by him in course of this case won him universal applause It was on this occasion that India s poet, Rabindranath Tagore, wrote his well known poem on Sri Aurobindo, beginning with the words —

> Aurobindo Rabindrer,
> Laho Namaskar
> (Rabindranath, O Aurobindo bows to thee,
> O Friend, my country s friend, O Voice
> incarnate, free of India s soul !)

Nationalist politics brought Sri Aurobindo into close touch with other all India progressive leaders, the most notable of whom was Lokamanya Bal Gangadhar Tilak. The two together vehemently opposed the moderate policy of the Congress led by Surendra Nath Banerjee, Phirozeshah Mehta, Gopal Krishna Gokhale and others Matters came to a head at the famous Surat Congress of 1907 The Maratha and the Bengalee succeeded in exposing the real character of moderate politics, and at the end of the Congress session Sri Aurobindo found himself almost against his will, in the centre of the limelight of all-India leadership with "Lal, Bal and Pal," i.e. Lala Lajpat Rai Bal Gangadhar Tilak and Bipin Chandra Pal.

On his way back from Surat Sri Aurobindo paid a visit to Baroda, where he met Vishnu Bhaskar Lele who had come from Gwalior to Baroda to give Sri Aurobindo some guidance in Yoga Yogi Lele advised Sri Aurobindo to strive to make his mind a sheet of white paper in order that he might receive a piece of *divine* calligraphy so that the divine could take possession of it and direct its future operations. The seed sown by Lele fell on a most *fertile soil. Sri Aurobindo resigned* himself entirely into God s hands. He had lost his identity as an individual and was to become Sri Aurobindo, the son and servant *of God* *His* nationalism was no longer to be a merely political programme It became a religion which had come from God. Spiritualised politics was henceforth to characterise the thought and activities of *Sri Aurobindo* *His themes* were the same old themes nationalism, swadeshi self help,

arbitration, the ethics of suffering, unselfish service and the necessity for reviving all that was good in our religion.

He galvanised Bengal into a blaze of spirited and high-souled endeavour and anticipated Mahatma Gandhi's methods of political action, notably passive resistance in many fields He realised the necessity of organizing village samities and of carrying the gospel of Swaraj to the villages and through them to the masses

This work was, however destined to be cut short. On May 5 1908 he was arrested and confined in a secluded cell of Alipore Jail where he was permitted by the authorities to have books. He began reading and re reading the Gita and saw the emanation of God around him. The Alipore trial of Aurobindo Ghose brought Chittaranjan Das into prominence as a leading lawyer of the time and Chittaranjan s peroration in the final argument contained a prophetic statement. The prisoner before the court, he declared was not an ordinary man. "Long after he is dead and gone he will be looked upon as the poet of Patriotism, as the prophet of Nationalism and the lover of Humanity ... His words will be echoed and re echoed not only in India but across the distant seas and lands... The man is not only standing before the Bar of this Court but before the Bar of the High Court of history " After a long and protracted trial, the British Judge, accepting the verdict of the two assessors declared Sri Aurobindo "not guilty"

Through his jail life Sri Aurobindo acquired the power to peep into infinity Emancipated in his mind and his soul Sri Aurobindo was now completely free although his friends in all parts of India were deported. Lokamanya Tilak was a prisoner in Mandalay others were undergoing imprisonment without trial in various other places, but Sri Aurobindo hurled himself once more into the divine endeavour "Our object, our claim is that we shall not perish as a nation but live as a nation and for this the people must be prepared for any suffering for without suffering there can be no growth." This period saw Sri Aurobindo's writings in the *Karmayogin* where he expounded the Upanishads and the teachings of the Gita and wrote essays

for the regeneration of the country He laid stress on the necessity of the practice of brahmacharya which sought to raise up the physical and the spiritual "Brahmacharya is the starting point but Yoga is the means to the finality of fulfilment" Nor was his idea of Hinduism parochial. ' We will sacrifice no ancient form to an unreasoning love of change We will keep none which the national spirit desires to replace by one that is a still better and dearer expression of the underlying soul of the nation. Sri Aurobindo s nationalism is a nationalism for enriching and extending life not for diminishing or destroying it. *The Karmayogin should perfect his own instrument* and leave it in the hands of God Only the man who has gone through the austerity and discipline of Yoga and has communed with the Divine is an irresistible leader against whom no human tendency can stand

Reports spread that the Government wanted to deport him, and so, only ten months after his release from Alipore Jail, Sri Aurobindo decided to go into a prison of his own fashioning. In February 1910 he left Calcutta for the neighbouring French territory of Chandarnagar and in April 1910 he reached Pondicherry where he could seek a more secluded spot for continuing his spiritual work, and there he soon completely surrendered himself to Yoga

The political leader was destined to be a saint. I came to Pondicherry" he said because I had been directed by the Voice to pursue my Yoga here." A new chapter in the spiritual history of India was about to open.

At Pondicherry, in the beginning, Sri Aurobindo lived a life of retirement with only four or five companions. This was a period of silent Yoga. Soon he decided to run a philosophical journal from Pondicherry The *Arya*, as the journal was called was published for nearly seven years, from 1915 to 1921 About this time Sri Aurobindo received at Pondicherry a remarkable French couple Paul Richard and the lady who is now known as the Mother The *Arya* had now a French edition which had, however to be discontinued on account of World War I. These journals were philosophical treatises which had as their ideals man s unity and man s transcendence

to supermanhood Among the many invaluable articles were the chapters of Sri Aurobindo s *The Life Divine* and *Essays on the Gita.*

The Life Divine the magnum opus of Sri Aurobindo, contains the broad outlines of his teaching. Sri Aurobindo knew that the life divine can and must be realised on earth. Man he said should transcend his human limitations and grow into fulfilment and the rich splendour of the Divine. He should achieve an earthly immortality and even his terrestrial life should assume a divine character The book deals with what the goal of man is and how and whether he may hope to reach it. Sri Aurobindo showed the strength and weakness of the human mind as the power which interprets the truth of universal existence for the practical uses of a certain order of things, but not the power which knows and guides that existence and therefore not the power that created or manifested it. As Sri Aurobindo puts it, "Reason was the helper reason is the bar " When, as a result of the next evolutionary jump the mind pierces through the lid of ignorance and touches the plane of supramental consciousness, man will have passed beyond "knowings' he will have acquired superconscient knowledge

Students of Sri Aurobindo's philosophy regard as its most original and valuable part his book *The Life Divine* with the description contained in it of the nature and evolutionary status of the Supermind also termed variously "Real Idea, Rita-chit, Vijnana or Truth Consciousness " By seizing the full significance of the supermind and linking it up with the rest of the available body of knowledge, Sri Aurobindo has been able to give us a convincing, synthetic and integral view of omnipresent reality *The Life Divine* holds out the prospect of the gradual uprearing of this evolutionary base of a life spiritual and supramental, the supermind

Sri Aurobindo's teachings do not aim at the development of any particular religion or to amalgamate the older religions or to found a new religion, for any of these things would lead away from his central purpose. The one aim of his Yoga is an inner self government by which one who follows it can in time

discover the one Self in all and evolve a higher consciousness than the mental that is the spiritual and supramental consciousness which will transform and divinise human nature. "There must be a total and sincere surrender there must an exclusive self opening to the Divine Power: there must be a constant and integral choice of the truth that is descending."

The Yoga Ashram at Pondicherry is in fact, a unique spiritual laboratory It is a dynamic phase of Sri Aurobindo's Yoga. All the Sadhakas are one in the Mother all meditate in the presence of the Mother The Ashram is but the rough sketch of the Promised Land.

The paramount thing in Sri Aurobindo s Yoga is to keep steady the flame of aspiration, to entrust the whole inner and outer life to the Mother and leave the rest in her hands. Sincerity and humility freedom from desire control or elimina tion of the vital movements, *japa* and concentration, all help to achieve the supreme and decisive act of *Atmasamarpana* for a Sadhaka.

Sri Aurobindo s message, broadcast from the All India Radio on the eve of Independence Day in 1947 laid stress on the necessity of unity and emphasised the resurgence and liberation of the peoples of Asia Asia has risen said he There India has her part to play in forming a world union for a fairer, brighter and nobler life for all mankind. A total spiritual direc tion given to the whole life and whole nature can lead humanity beyond itself

The educational activities of the Ashram at Pondicherry are remarkable. They have sprung from the idea of the Ashram which means the house or homes of a Teacher or Master who lodges those who come to him for the teaching and practice. Its basis is spiritual. Its aim is to give an integral education to the whole man, intellectual spiritual and physical.

Sri Aurobindo attained his *Siddhi* or perfection or self realization on the 24th November 1926 He passed away on the 5th December 1950 Soon after the passing of the Master-seer the vision of the Sri Aurobindo International University Centre was introduced to the world by the Mother Sri Aurobindo conceived the idea of developing at Pondicherry an

International University Centre with personnel from all over the world It was considered that the most fitting memorial to his name would be to found this University which would give concrete expression to the fact that his work continues with unabated vigour

Sri Aurobindo International University Centre at Pondicherry aims at that supramental education which will result, not merely in a progressively developing formation of the human nature and increasing growth of its latent faculties, but a transformation of the nature itself transformation of the being in its entirety a new ascent of the species above and beyond man towards Superman, leading in the end to the appearance of the divine race upon earth.

Sri Aurobindo did not limit the field of his activity to any particular sphere of the world but included the entire humanity even going beyond it. The Integral Yoga, Sri Aurobindo declared in 1921 is not for ourselves alone but for humanity and indeed it is not so much for the sake of humanity as it is first and last, and all the time for the sake of the Divine The Mother has explained the idea further in the following words:—

"It is not the welfare of humanity that we seek but the manifestation of the Divine. We are here to work out the divine will more truly to be worked upon by the divine will, so that we may be its instruments for the progressive incorporation of the Supreme and the establishment of His reign upon earth"

A European philosopher has recently spoken of the real ends of the world s religious systems in a way which has some relevance for us. All Indian religions teach us that it is possible to realise the immortality of human souls without direct recourse to the grace of Godhead For three thousand years the Hindus and Buddhists have believed in this have practised it, and have regarded as the supreme bliss the realization of the deep eternal unity of the human soul This is in sharp contrast with other theologies which broadly postulate the absolute corruption of human nature consequent upon the "Fall of Man" and man s total inability to help himself It is however a question for consideration what is to be aimed at after the

attainment of the identity of the soul with the cosmic soul for in a sense whatever satisfaction it may yield to the individual, it is individual satisfaction and therefore something that can be characterised as higher selfishness This was the dilemma that faced Buddhism since on the one hand it claimed that the soul s highest goal was Nirvana that is to say the extinction of the empirical ego and the realisation of the eternal soul or self and on the other hand, it practically demanded a complete giving of self in the service of others, even unto death. It was by way of a solution of this dilemma that the later forms of Buddhism introduced the idea of *Bodhisattvas* that is to say the saintly beings who postponed their Nirvana in order to enable others to reach the same blessed state. The same idea is repeated in the later religion of Christianity

There was in Buddhism no clear picture of what Nirvana consisted of Indeed the release from time and space could easily be so void of content as to be called emptiness. There may be rest in emptiness and peace but no further significance from the point of view of human society In Hinduism this dilemma was overcome by the conception of man s ultimate goal being to be like the Godhead but not to be merged into the Godhead In Bhagwad Gita the contemplation of God simply as our eternal exemplar leads us to the realisation of our own immortality According to the Gita, the mere contemplation of God will bring God into action again even if the contemplative concerned does not actually believe in his existence. But the integration of the personality around the immortal soul is the first step. Thereafter God himself draws the soul towards himself. The choice is his. Students of Comparative Religion, however, point out that even in this conception there is something lacking and that is the conception of God as transcendent righteousness as a result of the free will which has been granted to man. Here the ultimate responsibility rests with man for mundane affairs. He is in this world for a purpose and it is to do good and combat evil. This was the teaching of Zoraster who was a prophet and spoke to God face to face According to Zoraster's faith and the Jewish faith, body and soul were not separate and both contem-

plated bodily resurrection for man. That would be a new heaven and a new earth.

In view of the destruction that demonstrably overcomes the body and in view of all that science has taught mankind it seems more reasonable to assume that while the body is destined ultimately to fall into decay the soul can be immortal. Whether the soul united to God assumes the form of a resurrected body does not seem in truth to matter very much Whether the body disintegrates on account of original sin or because of some more complex cosmic purpose does not seem to be a matter of great importance. On the whole the most satisfying belief seems to be that of Hinduism, diagnosing the human condition as being an unnatural union between the eternal soul and a perishable body

The teaching of Sri Aurobindo carries this thought further "To fulfil God in life is man's manhood" "All life is only a lavish and manifold opportunity given us to discover realise and express the Divine." ....."God speaks to the heart, when the brain cannot understand him" ....."After all, the best way to make humanity progress is to move on oneself" .. "Each man belongs not only to the common humanity but to the Infinite in himself and is therefore unique .. "The divine perfection is always there above us but for man to become divine in consciousness and act and to live inwardly and outwardly the divine life is what is meant by spirituality" Spirituality respects the freedom of the human soul because it is itself fulfilled by freedom".. ..."The meeting of man and God must always mean penetration and entry of the Divine into the human and a self-immergence of man in the Divinity"

Those who accept and practise to the extent they can the teachings of Sri Aurobindo believe that, although his terrestrial body has attained its rest, his spirit lives and guides. These relics of the great seer are symbolic of that eternal immanence which will help and guide those that concentrate on their Yoga in these sanctified surroundings They will assist the sincerity of the Sadhakas and promote their attainment of the ultimate integrity—the climb to divine supermanhood that will usher in,

when sufficiently widespread the radiant new world which must be the intent of the Supreme Consciousness and Power above the universe Let me give this denouement in the words of Sri Aurobindo himself

"Man is a transitional being he is not final. For in man and high beyond him ascend the radiant degrees that climb to a divine supermanhood. There lies our destiny and the liberating key to our aspiring but troubled and limited mundane existence

"We mean by man mind imprisoned in a living body But mind is not the highest possible power of consciousness for mind is not in possession of Truth but only its ignorant seeker Beyond mind is a supramental or gnostic power of consciousness that is in eternal possession of Truth. This supermind is at its source the dynamic consciousness in its nature at once and inseparably infinite wisdom and infinite will of the divine Knower and Creator Supermind is superman; a gnostic supermanhood is the next distinct and triumphant evolutionary step to be reached by earthly nature.

"The step from man to superman is the next approaching achievement in the earth's evolution. It is inevitable because it is at once intention of the inner Spirit and the logic of Nature's process.

"If earth calls and the Supreme answers the hour can be even now for that immense and glorious transformation."

16

RAJASTHAN UNIVERSITY*

I am grateful to the Vice-Chancellor for having asked me to address this Convocation. This will be my seventh con vocation address since I assumed charge of my duties as Chairman of the University Grants Commission in a period of about fourteen months which gives an average of one address every two months. I do not think that it needs anyone directly connected with university affairs to realise that this is far too excessive loquacity on my part and I should have ordinarily imposed a self-denying ordinance on myself My only excuse is that because of the interest I take in the development of our universities and particularly in the development of your young University I committed myself many months ago to delivering the Convocation Address for the current year In a sense I am glad that I did so as it gives me the opportunity of making a few observations on the problems of development of your University I have now visited about 30 universities and have discovered that although there is a family resemblance amongst them all, the problems of each university are unique and call a little special attention

By way of introduction, let me give you some compara tive statistics in regard to the area, population and revenue and plan expenditure per person of Rajasthan as reconstituted last November as compared with those of the other States in India.

In the matter of area Rajasthan stands third among the States of India with an area of 132,000 sq miles as against 190,000 for Bombay 171 000 for Madhya Pradesh 113 000 for U P and 47 000 for East Punjab. The density of population, however is only 121 as against 901 for Kerala, 777 for West

* Address delivered at the Tenth Convocation on 7th December 1957 at Jaipur.

Bengal 598 for Madras 5*7 for U P 340 for Punjab 253 for Bombay end 152 for Madhya Pradesh In the matter of the rate of revenue expenditure per head, Rajasthan with Madhya Pradesh Andhra Pradesh Madras Bihar and U.P belong to the poorer category of States, the corresponding figure in more favourably situated States varying from Rs. 23.5 in Bombay about Rs 27 in East Punjab West Bengal and Kerala and over Rs 30 in Assam and Mysore In regard to plan expenditure per head Rajasthan is a little better than the average of Rs 60 for the plan period with West Bengal, Assam and Kerala, while East Punjab Mysore and Bombay are markedly better and Andhra Pradesh a little worse and Madras Bihar and U.P distinctly worse.

These statistics give some indication of what the difficulties of the State are to which should be added the handicap of the constitution of the State as a result of its political integration. To add to the complexities of the situation, it is one of the rare cases, where the University controls the High School Examination, in addition to University Education and Research, and the medium of instruction is both Hindi and English excepting that English is exclusively used for post graduate teaching and research. The total number of students looked after by the University is about 18 000 which is considerably less than 2000 per million of population for the whole of India. The percentage of literacy is 8 95 (made up of 14 44 for men and 3 for women) against an All-India average of 16 61 Most of the 51 colleges are Government institutions and in all branches of education, the burden falls mainly on the State, unlike other States where local bodies or private managements share it. Although the expenditure budget of the State on Education now forms 18.9% of the total, which is about the same per centage as in Bombay and Madhya Pradesh, a little higher than in U.P, Bihar and Punjab and considerably lower than Kerala, it has to be remembered that while some of these States with higher percentage have a larger percentage of literacy Rajasthan is very backward in this respect. As pointed out in a note published by the Rajasthan Government sometime ago in connection with the then troublesome question of

revision of fees in schools and colleges, the scale of fees is even after the partial increase agreed to recently, among the lowest in India, being Rs. 8/ for the fourth year as against nearly Rs. 10/ in Bihar, Rs 12/ in Punjab and U P and over Rs. 15/ in Madras

The number of faculties in the University are the usual ones i e. Arts, Science, Commerce Education Engineering, Law and Medicine, and there are only five departments of teaching and research in the University namely Economics, Geology Philosophy History and Law as against more than twice that number in most of the other universities. The number is in the absolute sense far too low for securing the comprehension and balance which modern conditions demand of a university and the rapid development of the post-graduate departments of the University is its most clamant need. Here again on account of historic reasons the situation is complicated by the fact that these departments are located in different places—those of Economics, History and Law being at Jaipur and Philosophy and Geology being located at Jodhpur and Udaipur respectively Before the end of the Second Five Year Plan, the University hopes to be able to establish post graduate teaching in the sciences in three separate locations, Jodhpur (which is also a big centre for Engineering and Technological education), for Physics Chemistry and Mathematics Ajmer for Botany and Zoology and Udaipur for Geology Geography and other related subjects. There are a number of post graduate departments being taught in Arts subjects in the various Government and private colleges and their transfer to the University post graduate departments or in the alternative, their adequate co-ordination and control by the University, will present difficult problems which might have to be held over till after the completion of the Second Five Year Plan.

The University Grants Commission being concerned with only the development, as distinguished from establishment and maintenance of State universities cannot under the law help the University in regard to the completion of administrative block. For the completion of the University Library academic

blocks, laboratory buildings and scientific and workshop equipment, hostels staff quarters etc. however as well as for certain other structures for academic and extra curricular activities, assistance can be extended by the University Grants Commission The Government of Rajasthan have made a free gift of 200 acres of land in the outskirts of the City of Jaipur to the University where the construction of administrative block and the academic blocks library etc. has already been started. The total cost of these buildings was estimated last November to be Rs 45 lakhs but it is possible that since then there has been a rise of 10 to 15 percent in the estimates. The University started with a sum of Rs. 25 lakhs as the nucleus of a building fund and it is to be hoped that any additional funds required for the building up of the University which cannot, according to the rules be furnished by the University Grants Commission will be provided by the Government of Rajasthan. A total of Rs 6.12 lakhs, non recurring expenditure and Rs. 75 000 recurring has already been approved for the development of research and teaching in Geology (and Rs. 1 31 lakhs paid) and plans in regard to research and teaching in the other sciences, involving Rs. 19 59 lakhs non-recurring and about Rs. 4 lakhs recurring are being examined by the Commission s Visiting Committee shortly

The University Grants Commission approved of the scheme of construction of a library building for the University even during the First Five Year Plan period and the work is in progress. The Commission has also informed the University that the proposal for the purchase of books for the library would form part of normal development programme of the University A sum of Rs 40,000/ was paid to the University on this account during 1955-56 and an equal amount the following year The development plans on the Arts side forwarded by the University have undergone expert examination and sanctions implying financial assistance to the approved extent have been issued or are under issue In addition the Commission has, on reconsideration accepted the scheme of the University for completion of an academic block to accommodate its post graduate Arts department at a cost of Rs. 6.71

lakhs. An amount of Rs 5 lakhs is also likely to be advanced to the University for the completion of hostels.

Although much of this has only a general sort of interest for the student audience before me, I think it is important that they should know the main facts in regard to the development of their University This seems all the more necessary in view of the disagreement that occurred between the Government and the student body in regard to the matter of the raising of tuition fees. Since the University Grants Commission is not concerned with the question of the maintenance of the univer sities, the adequacy or otherwise of the manner in which the university is maintained by a State, which means all sections of its public, is bound to affect the pace and character of its development and I should imagine that all sections of the public would readily agree that the social and economic advance of a State would in the ultimate analysis be found to be the foundation of development on sound and healthy lines of its university or universities. I therefore, permit myself a few observations in regard to that dispute although at present that dispute stands settled

Since the rate of fees in force in Rajasthan is demonstrably and relatively low as compared with rates prevalent elsewhere even in States no more affluent than Rajasthan as for example U P and Bihar it seems to me that any impartial judge would agree that there was room for raising the fees. Whether the rates of tuition fees are raised or not, for the proper functioning of the institutions of higher education money has to be found and since there is not very much of a difference in regard to the relative affluence of States in India in the ultimate analysis the money will have to come from the local people in one fashion or another In the field of education itself, considering that the State bears the constitutional responsibility of making elementary education free and compulsory and has also, in com mon with the other States of India to expand its secondary education, a significant part of the burden of university educa tion should be borne by those who are benefited by it. This does not, of course, exclude the possibility of freeship and

scholarships for promising students who are not in affluent enough circumstances to pay for their education, and whose instruction in the University is regarded as beneficial in the interest of the State itself Looking back to the whole incident, if an outsider can venture a judgment it seems to me that if there had been proper prior consultation and preparation with the public concerned in regard to this matter the issue might have very well been different and that, in any case some of the unsavoury incidents which marked the student agitation against the raising of fees might have been avoided

In my addresses I have generally refrained from animadverting on the much discussed question of student discipline as I have held the belief that the heart of the student body in India is, as elsewhere, sound and that while the task of dealing with occasional upsets rests primarily with the university and State authorities for an outside friend and well-wisher it is very much more worthwhile and proper to interest the students in the more basic and fundamental facts of university life and their relation to the environment of present-day society I feel however that I have to take the occasion of this Convocation Address to make a few observations in regard to student attitude and behaviour

As I said earlier I have by now visited most of the universities in India and have also acquainted myself with the conditions prevailing in some of the other important centres of higher education within the jurisdiction of the universities My general opinion that the student body of India is no better or no worse than such bodies elsewhere in the world still remains unshaken, but that does not absolve me from the duty of offering comments on some aspects of this question of student attitude and behaviour I feel that in the special circumstances of our country and the present demands that these circumstances make on every section of the community too much cannot be said in regard to the rights and responsibilities of every section.

Anyone who is dealing with the question of student attitude and behaviour in universities would do well to start with the fundamental truth the university is for the students" as enunciated by one of the Presidents of an American university a few years ago and as quoted with approval by

Clarence A. Schoenfield in his illuminating book 'The Univer sities and its Publics" which was published in 1954 The recognition of this basic truth will help to correct many an error that is committed by those responsible for or interested in, university administration, and for this purpose it is also necessary to recognise that by 'the student is meant by and large the undergraduate, not so much the post-graduate who is more concerned with research For a proper consideration of this question, it is also basically necessary for everyone to cast his mind back and recall the days when one was a student. Many of the misunderstanding between parents and children mothers in-law and daughters-in law teachers and students, are caused by this failure to remember that the parent or the mother in law or the teacher of today was the child or the daughter in law or the student of some years ago

Bearing in mind all the while these two basic truths and agreeing with writers on the subject, I would postulate a few other important considerations. One is that the student has a dual personality on account of the period of adolescence through which he is passing when he goes through his university education In some matters he acts like the grown up that he is from the point of view of intellectual capacity provided of course he does not reach the university stage too early as is apt to happen in an undesirably large percentage of cases but in others he is apt to be moved by considerations and influences which would not ordinarily affect grown-ups Further he is affected not only by the seasonal pulse of his curricular and extra-curricular activities, but is also powerfully influenced by socio-economic environment beginning from problems of family and community relationship and passing through national and international occurrences. Moreover in his intellectual make up there is no cohesion and his true allegiance is apt to be reserved for only one subject or one group or one activity In most cases his main pre-occupation will be how to learn a profession and earn a living

If these basic premises are correct, as they appear to be a great deal more has to be attempted both in regard to teaching

and in regard to student welfare matters which, at any rate, are within the control of the university administration before fault can be found with students for occasional aberrations

In regard to instruction it is safe to assume that most of the students are open to intellectual reaction, but will not unnecessarily furnish proof of having reacted in the right way to instruction even if they are successful in examination Further they are perfectly capable of telling the bad teacher from the good and can be devastatingly *right in their assessment of* the qualities of their teachers. Mediocrity among teachers may be overlooked by the authorities, but is seldom missed by the students, whose ratings of their own teachers are often very valid The first essential would, therefore, seem to be to ensure that the teachers possess the sort of qualities that students look for These have been enumerated as follows Mastery of his own subject and in the related fields, enthusiasm for his vocation and the capacity to express thoughts well and to marshal material so as to make the subject interesting, personality consisting of dignity refinement, poise, self respect quality of voice, sense of humour, capacity to take criticism gracefully concern for the student as an individual consideration for student s convenience and fair dealing with him particularly in judging student achievement avoidance of stereotyped lectures from notes or standardized text books good organisation of courses absence of pontification, intolerance especially of questions by students sarcasm and criticism of colleagues.

In regard to the organisation of courses, the teacher has to *take care to relate scholarly subjects to realistic situations* and has to provide the maximum of factual information and sound guidance. On the part of the university faculties also there is a duty consistently to review curricular patterns in the light of current needs There has of course, to be avoidance of unduly large classes and an improvement in the inadequacy of labora*tory and other accommodation*, libraries and equipment. If the situation is patiently analysed it would be found that most students are capable of developing their fundamental qualities of good will and desire to be educated bear no antipathy to professors and want to be known, liked and treated as an

individual who matters. They will also be found willing to be oriented and to work if properly guided and given education too.

In regard to student welfare and extra-curricular activities a great deal of sincerity and constructive competence is required on the part of those members of the university whose special business it is, or should be to look after student welfare. Constant and comprehensive attention is also to be paid to all aspects of the university enterprise because of the dispersal of student interest and student allegiance already referred to above. There has to be constant renewal of contacts between administration and teachers on the one hand and students on the other, an inter communication to keep up student morale. I should like here to quote from Schoenfield's book, Student welfare and cultural activities should not be sharply removed from the academic faculty and its chosen enterprise. "Indeed only to the extent that student personal services are rooted in academic soil are they truly constructive. The only purpose of such activities must ultimately be to help carry out the central objectives of higher education They are not ends in themselves; nor business operation not puerile pep rallies. If they are not part of the main stream of educational experience, if they are more distracted than supplementary they are worse than useless In order to achieve this co ordination between the curricular and the co-curricular it is essential that student welfare administrators should have solid academic background."

Someone has drawn attention to the curious fact that while in the ancient universities of Europe as Bologna the affairs of the University were largely controlled by guilds of students, student influence on the conduct of the affairs of a modern university is neither systematically nor adequately organised What is suggested is that some system should be organised for the regular and responsible transmission of the student point of view to the administration. It is not intended that there should be in any sense abdication of its function by the university authorities All that is meant is that student representation should be secured of an appropriate kind and at

all appropriate levels if necessary by non-voting participation of students, even in academic bodies and certainly in most of *the extra-curricular activities. It is also* suggested that conferences should occasionally be held with student representatives in regard to the question of improvement of campus and development of university They would also be valuable in arranging for a scientific poll of student opinion designed on the advice of those who understand statistical sample survey and weighing and analysis of assembled data. It is realised that by all these methods one can only hope to get a representative, but not necessarily a universal student point of view but this should be sufficient for all practical purposes.

Mention must be made at this point of bad influence on the student body both from inside and from outside. From inside these influences represent mischief by mal-contents and mis-fits who happen to be a minority only not very much interested in the process of instruction and at the university for other less justifiable purposes The other sort of undesira ble internal influence is that of irresponsible or positively perverse teachers interested not in instruction but in pact or party formation and mutual patronage. The outside influences are those of political leaders usually of the less responsible kind and other agitators who have their own ends to secure by using the student body as their tools.

It is against this background and perspective that the duty evolves on the university administration to improve student instruction and student morale and to secure student understanding which is "at the heart of the successful university enterprise"

It remains now to examine what action university and other authorities can take when despite the utmost care student disturbances break out. It would be unreasonable to expect that even a well ordered university will escape such disturbances and up sets having regard to the characters of student psychology referred to earlier especially the important fact of their being sensitive to all their socio-economic environ ment. There are many instances recorded in history in retrospect at any rate often commended of student participation

in big national movements, not only in our country but else where as in the China of Sun Yat Sen, and in other countries during the present generation It is as fatuous to ask students not to get angry not to lose temper not to forget their manners or morale on actual or supposed provocation, as any other individuals or sections of community There is no human being who has not sometime or the other in his lifetime lost temper or been guilty of discourteous language or behaviour or is not carried away by some irrational excitement or another Just as the world has indifferently evolved a way of dealing with these aberrations from the men of ideal reality and poise and indeed is prepared even to tolerate them from supposedly able men, especially in politics, so can university authorities evolve modes of conduct for dealing with such situations. If in these struggles between authority and the students certain firm decisions are taken by universities the students have no right, on the other hand, to feel aggrieved It is only just that every person be prepared whether he is a student or not, to pay the price of his deviation from normality and in this matter he cannot claim to be his own judge Let everyone be man enough to take his medicine

It is unfortunate that in these matters the more mature and experienced individuals and sections of community continue to set bad examples of behaviour to students, especially with reference to hooliganism and strikes particularly hunger strikes.

Hooliganism is in my opinion, an inexcusably low behaviour no matter what the circumstances or the provocation. It is a form of cowardice often indulged in by those who are incapable of genuine bravery courage or heroism. Amongst students it appears to take, where (rarely one hopes) it is in existence a singularly offensive form, viz., molestation of girl students I have had reports about its existence on certain university campuses from responsible and sympathetic observers as well as from the Vice-Chancellors themselves. One observer writing about a university in another part of the country writes, 'It is difficult for a girl to walk through the area of the University or ride a rickshaw without invoking

trouble It is difficult to account for such behaviour on the part of young men who must have sisters of their own. I would suggest that such behaviour be taken notice of and suitably penalized by student bodies themselves such as Student Councils.

Whatever the moral or spiritual justification for the undertaking of hunger strikes and fasts unto death by great men—and all men who have undertaken such fasts in recent years are not as great as they rate themselves—hunger-strikes should be regarded and dealt with as the criminal offences, they are viz. attempts at suicide Alternatively it would perhaps enhance the spiritual gains if the fasts and strikes are allowed to proceed to their logical triumphant conclusion, instead of their being interrupted by solutions and compromises for the latter in effect mean surrender of society to a subtle form of violence and coercion.

The tragedy about strikes in general is that they mean waste of time and labour when the country needs the maximization of everyone s work for its economic development and advance ment. Strikes may have a recognised and regulated place in industrial relations but elsewhere they are disloyalty to society On the part of students in colleges and universities they constitute further erosion on the already unduly brief period of study, an attrition of the already meagre record of achievement and performance of the average university youth Whilst on this subject, I should like to reiterate my plea made elsewhere for a reduction in the number of holidays No country which indulges in the luxury of enjoying so many holidays, in conjunction with sub-normal production or work in all spheres of national life, can hope to make much of a mark in the world.

I should like to conclude on this note but before I do so I extend my felicitations to the new graduates felicitations which *it is for them to invest with significance by pondering on* what I have said in this address. Constant self-introspection, self-regulation and self-control directed towards the preserva tion of all the harvest of self-development of a university education on the part of all alumni, are the only guarantee for their most effective service to the State and the country

17

STUDENT CHRISTIAN MOVEMENT OF INDIA*

I greatly appreciate the courteous but brief manner in which I have been introduced. That leaves a little more time for my address and I propose to utilize this additional time for a few introductory observations of my own. I welcome also the setting apart of a little time for questions and answers

At the outset, I should like to express my satisfaction at having been invited to participate in this triennial National Conference of the Student Christian Movement of India. In extending this invitation to me towards the end of March 1957 your General Secretary Rev H F J Daniel, explained that the principal aim of the Movement is to present once in every student generation a firm and clear statement of the Christian faith in the context of the world we live in today He was careful enough to point out that this was not done in any communal spirit, but on the contrary with the explicit object of encouraging Christian students to play their full part in the life of the nation, adhering faithfully nevertheless to their devotion to Jesus Christ, and to develop a sense of commital to the plans and project as a whole that is the great national task of reconstruction. The title of my Address "Forward with the Nation" as befits this aim has been suggested by the General Secretary and I have adopted it, interpreting it as an essential stage towards a more comprehensive ideal: "Forward with Humanity"

I regard this wider perspective essential for more than one reason. I notice that the Student Christian Movement of India

*Address delivered on 26th December 1957 at the Triennial Conference of the Student Christian Movement of India, Pakistan and Ceylon held at Guntur

is affiliated to the World's Student Christian Federation. I believe therefore that it must be implicitly in sympathy with the wider and more basic aim I have just stated. I am glad to see also that though the majority of the delegates of this Conference are Indian there are present also students and seniors from Pakistan Ceylon Australia, U K. and some other countries

The tradition of Christianity has for nearly two thousand years grounded democracy on an indestructible spiritual basis, *to quote the words of Salvador De Madariaga. Christ died* on the Cross for men for all men, for any man, and this has given to the individual Christian a value no one can challenge, although one that many individuals and societies professing the Christian faith have through the centuries failed to translate into practice Far too long have mind and will, science and religion materialism and spiritualism appealed to self-deluded humanity intoxicated by the ancient humanistic triumphs of the mind and the modern spectacular conquests of science as *irreconcilable antitheses But there are signs of a saner and* humbler attitude on the part of scientists and philosophers. The scientist is less sure of himself and is less and less confident *that science can furnish all the answers and philosophers are* becoming more and more aware of the inner reality of things that faith and religion whether revealed or otherwise help man *to receive Today the fields of science philosophy and religion* stand better surveyed and defined and discovered to be but parts of one comprehensive truth, limiting the old conceptions of the intellect's infallibility and investing reason's investigations with humility for the greater elevation of the spirit of man. The pursuit of materialism has been tempered by the fundamental truth that its triumphs will be worth nothing if in their advancement human beings are used as tools without their free assent

Against this broad canvas of man's highest goal, namely the free development of individual excellence as the means conscious or unconscious, of the greatest good of human society and the fulfilment of the Divine Will, one need not experience any difficulty in reconciling the claims on man of community

faith and nation Natural congregations commencing with the family and looking to the distant but not impossible idea of an international community of nations need encounter no problems of irreconcilable loyalties. The spheres of the true and just interests of each congregation can be properly defined if all along the ideal of the advancement of the optimum common good is never lost sight of

In this endeavour religious faith, transcending reason's somewhat inhuman guidance, can be a potent influence, religious faith with a surprisingly large measure of a common ethical code With my cultural background, I am one of those who are prepared to accord recognition to diverse religious faiths whilst insisting on the observance of a unique ethical code in all spheres of human activity I repudiate as basically disingenuous the use of different moral standards for private life and public life, for relations amongst individuals and the individual's relations with society organised in academic life business life or political life

Perhaps, this is the stage at which I can appropriately pay my tribute to the Christians of India I believe that the Indian Christians follow ways of life which foster the social virtues of cleanliness, respect for the law and the dignity of the individual. I regard the community as a source of great strength to India in the cooperative world sense I have referred to earlier I have read some of the previous reports of the Students Christian Movement of India with great interest and appreciation. What has appealed to me most is the earnestness of the organisers of the Movement ever to press forward to higher life in the Movement in all its aspects and perplexities of purposes and practices, vis-a vis students faith, attitude towards non-Christians, everyday conduct the home studies, social problems and politics. It was at the end of the 1954-55 *triennial conference that the Movement affirmed its conviction* that Christians should be drawn into full participation in the life of the nation. I was particularly glad to read an account of the recommendation by the Movement in regard to the urgent need to help students to realise the nobility of serving the under privileged particularly in the rural areas.

It is time now to turn to the major theme of my address In suggesting the title for the address the General Secretary delicately hinted that the address should not concentrate exclusively on matters of economics or statistics, and should not confuse the simple-minded with too much discussion of the many perplexing questions that arise in the course of nation-building. I shall endeavour to abide by this caveat and shall attempt to restrict to the minimum technical discussion and statistics

Let me give just a few statistics and have done with them. Our present national endeavour is to bring about an appreciable improvement in the standard of living. In absolute and relative terms, national income per head of population is commonly accepted as a convenient measure of a nation s standard of living. As a frame of reference which is to be borne in mind the average of Rs. 4 000/ per annum is approximately the national income per head of the most advanced countries of the world as against Rs. 400/ approximately the average for undeveloped and under-developed countries (it is less than Rs. 300/ for India Rs. 272/ actually little over as at the end of the First Five Year Plan). The process of improving standards of living is carried on with the help of investment out of the saving of the nation. The more advanced countries are currently investing anything from 10 to 25 per cent of their much larger national income In the under-developed countries, where people live on the margin of subsistence, the corresponding figure is less than 10 per cent although in such of those countries as are running what is known as a totalitarian regime as distinguished from a parliamentary form of democracy, the percentage is reported to be between 20 and 25

Two conclusions emerge from these figures one that the annual saving, and therefore investment and growth of national income in the most advanced countries, is equal to or greater than the whole of India s per capita national income and the present disparities between them and us are therefore bound to be progressively magnified and two that as regards countries whose stage of development is at present comparable to that of

India s e g. China, the improvement of the standard of living will be much more rapid than in India China is bound to out pace India within a short time One need only add to these propositions that whereas in the advanced countries employ ment is almost over full, and in China reported nearly approa ching fullness, we in India shall be struggling with unemploy ment, howsoever defined, for several years to come, considering the rate (apparently increasing in the short run) at which our population is growing

Apart from such comparisons, if there is to be an appreciable rise in the Indian standard of living it is necessary to secure an increase in national income which will keep ahead of the increase in the population. Some experts hold, probably correctly that India s population will double itself by say 1990 It is obvious that if we are to register progress, and not stagna tion or deterioration in the standard of living, we should double the national income per head of population in a significantly shorter period like say 15 to 20 years

It is just this that India is essentially attempting to do through her Five Year Plans. The current Plan is no longer likely to raise the national income by 5 per cent every year as originally aimed at Even if fully implemented in financial terms, because of the increased costs, it is likely that the period required for the task in hand will be nearer 20 years than 15

The above facts raise two major issues : (1) what is the duty of the more fortunate nations in the matter of assisting India s economic development and (2) can or should India try to emulate say China, by modifying her form of Government ?

The answer to the first question has been suggested by several enlightened representatives of the more fortunate and advanced nations. Economists and scientists of international repute such as Myrdal and Blackett have urged that as a step in the integration of mankind by reducing disparities, the more advanced countries should systematically divert a small per centage of their income, even as low as one per cent, towards helping the undeveloped or underdeveloped countries of the world to build up their economies on a planned basis. Although

the underlying principle is apparently grudgingly and very cautiously accepted, judging from the recent decision of the United Nations to set up some sort of special Fund for the economic development of underdeveloped countries, it is perhaps too much to hope that this appeal will be fully heeded and it may be assumed that progress in raising India's standard of living will be slower than assumed for the purposes of the Second Five Year Plan. It is this conclusion that gives rise to the next question i.e. should India therefore deviate from the principle of parliamentary democracy?

The answer of India's thinkers and statesmen is definitely 'No'. I not only fully agree with this conclusion but believe that it represents the people's choice. Political views are often a matter of faith rather than a matter of arguments, and it is my belief as well as my faith that the ultimate goal of the integration of mankind can be reached only by the practice of democracy i.e. by the active recognition of the dignity of the individual and by affording free scope for the development of the individual.

But even where democracy is firmly established, it has its difficulties such as apathy to politics on the part of some and unprincipled use of politics on the part of others in the population. To continue in office becomes the end in itself and not the means of attaining certain desirable public ends. The day-to-day administration is often not sensitive enough to the peoples comfort and convenience and legislation is often undertaken ahead of the peoples readiness for reform with consequent failure in enforcement

In countries like India where democracy in the modern sense has yet to be established, it is all the more necessary for politicians and administrators to watch their steps and for the leaders of the public opinion to safeguard the spirit of democracy by subjugating sectional interests and by promoting the right kind of value and judgments by means of social or fundamental education. The maintenance and reinforcement of democracy involves the improvement of each and every-one of its constituted elements as for instance the social

education of the people and the strengthening of the ethical code of politicians, businessmen and academicians.

The building up of the nation within the rules of parlia mentary democracy has its own advantages and disadvantages. The disadvantages are perhaps too apparent in the competitive world of today, where humanity has not progressed noticeably beyond national integration in its most advanced sections and where keeping one's own garden pretty is the height of political aspiration. The material progress registered in countries whose national life is controlled by a small but powerful group of leaders and where the State is all powerful and the individual but a regimented tool for fulfilling the behests of the State is often spectacularly great in the short run. By short run one may understand periods upto half a century or even a century Till the end of the 19th century the world witnessed in the same way great progress in certain countries under the rule of benevolent despots, progress, much of which endured even after the replacement of the despot in course of time by some recog nisable form of democracy Just so, one should be prepared to find in totalitarian countries short-term material progress, much of which will undoubtedly endure. But the enfeebling of the the human spirit in the process is, I suggest, a price which no people, at least in cool reflection should be willing to pay The phenomenon is comparable in its unpredictability to nuclear warfare and is a thing like nuclear warfare, to be avoided at all costs short of self destruction (unlike the snakes of St. Patrick, people will not commit suicide to save themselves from slaughter) The disadvantages of democracy can, more over be minimised by conscious efforts and its advantages like-wise maximised, and this is the central and dominant problem in nation building

Every society assisted by its planning experts can perhaps plan wisely But the plan can be implemented in the fullest possible measure only with conscious, individual free action and continuous public co-operation after realisation of the sacrifices involved for any worthwhile plan means sacrificing some of the present for a better future for society

It is in this context that I attach the utmost importance to educating the people in the broadest and most fundamental sense of the term They must fully understand the objects of the Plan as well as its grand strategy The benefits to come should not be exaggerated and the present difficulties under stated or wrapped up in vague and evasive pep-talk. For an intelligent electorate and all electorates should be assumed to have intelligence, although not of the conventional kind will be found ready to cooperate and their cooperation will be willing and unfaltering when it is fully informed To understand is not only to forgive negatively, but to help, positively In concrete terms, I regard it as of the utmost importance for the success of the Plan that all sections of the people are enabled to under stand why in democratic planning progress cannot be as rapid as totalitarian or global planning. But they should learn to believe that even if the mills of democratic planning grind relatively slower, they grind much finer Human nature being what it is, neither the extent of current sacrifices nor the intensity of the current readiness to work will be as great as when the individual is regimented by the State. But material progress, *unconnected with the free expansion of the spirit of man* defeats its own purpose which is presumably man s happiness. It is only by wise balancing of the right of the individual with his obligations to society that the sum-total of human happiness can be maximised on an enduring basis

The advantages of democracy with its twin aim of elevat ing living standards and enlarging social justice, lie essentially in the spiritual field and it is on the maximisation of these advantages that societies and individuals in democratic countries must concentrate

Politics is the most important aspect of social organisation and tremendous responsibilities of leadership rest on the politicians, especially politicians in power As a healthy opposition is an essential feature of parliamentary democracy *it is wrong that parties in* power should seek to continue in office even at the cost of basic principles or by elevating political and electioneering expediency into an over riding principle. *If the* esta blishment of a socialistic pattern of society *is the goal party*

funds should not be replenished by as good as forced contributions from large scale and incorporated private enterprise. If the abolition of casteism is the goal it is unjustifiable that for the elections candidates should be selected with reference to their status in their caste so as to pander to caste predilections for electoral gains. If the character of the nation is to be built up, it is not right to allow notorious, although unproven, transgressors of the law to contest elections with party support. If young blood is essential for maintaining a succession of efficient political administrators it is destructive of the people's faith that in place of graceful retirement dying in harness should become an obsession for men in high places. To me, some propositions seem incontestable if politicians are to give the right lead to the country One is that the politician is for the service of the country not his or even the party's service at the cost of principles and ethics. Another is that politics of the right sort calls for a refined mind and not just mechanical party loyalty on the part of practitioners who are themselves nonentities and whose only claim to be the peoples representative is that they are contesting the elections under the wing of a well-established party The third is that sectional interests must not be allowed to be advanced by the politicians, as for instance labour leaders at the cost of the interests of the community

In this last regard I should like to suggest, what I have previously expressed elsewhere, that increases in the privileges of organised labour must be related to carefully determined norms of productivity This is all the more necessary in a mixed economy like India's where the bulk of industrial production is perforce obtained from the private sector where additional cost can upto a considerable extent be transferred to the hapless and helpless consumer who is by and large much poorer than either the capitalist or the workman (for instance, the emoluments of teachers in industrial cities are demonstratively worse than the emoluments of workers, a curious result indeed of the dignity of labour so assiduously encouraged by all and sundry) Another sphere where particularist interests often triumph over the general is that of regional economic development. The ultimate cause of this is undoubtedly the expectation of greater private

economic benefit, although often pressures are for tactical purposes exercised openly generally in the name of culture or language and surreptitiously in the name of caste community or sect This to my mind is the greatest danger to national integration, and the only antidote against this is energetic, sincere and unfaltering State action at all levels to remove regional disparities as expeditiously as possible The people at the top must stand committed to this as to an article of faith Its neglect can mean only one thing, namely the disruption of the nation The guidance of State policy by groups in power headed by powerful but highly partisan personalities has already brought disruption to some States and caused wounds which only a just and wise government can heal.

But the whole onus of safeguarding our nascent democracy cannot obviously be laid on the shoulders of the politicians alone Their efforts at self improvement will be accelerated by the capacity of the electors to judge issues rightly which involves both the elimination of ignorance and the development of a sense of right and wrong, the instilling of a habitual vision of greatness" the cherishing of high ideals the cultivation of a sense that the individual lives not for himself alone but as a member of society sharing its life and responsibilities that is education in its truest sense. As someone has well said 'the quality of democratic society cannot rise above the level of the people who compose it."

The education of the people involves a wide range of problems, from fundamental education, removal of illiteracy education of women and the improvement of the quality of secondary and higher education. This is not the occasion for more than making a bare *mention of these problems. The training of the* individual in citizenship is the most essential task of modern societies and half hearted national support for education is in this context a grave error Rightly had H G Wells observed History is a race between chaos and education." Among the principal desiderata in the field of education is avoidance of the tremendous wastages at all levels involved in the results in comparison with the national out lays Wastages can effectively be

avoided only by consolidating rather than expanding, by making the vocation of a teacher very much more worthwhile and by furnishing positive inducement to the students to improve their application to their studies. That this can be achieved successfully even in our country is being demonstrated by some of our leading institutions amongst which I am happy to testify are many run by Christian missionaries. It is only when high standards are ensured at all levels that expansion should be permitted. There is no risk of such an endeavour holding up the nation s supply of educated personnel in view of the very low efficiency of our present educational systems and its unnecessarily high rate of wastages. To take one instance, we can afford to pay our teachers well and at the same time to ensure with even the existing coverage a far larger number of literates or citizens or experts turned out by the schools and colleges and universities for jobs involving academic, professional and technological leadership or the support of such leadership.

For undeveloped countries such as India with immature democratic institutions, two prevailing aspects of the national life have to be corrected energetically and organs of healthy public opinion have to be built up—a three fold task. The two features are in the nature of imbalances being (i) the intellectual and cultural distance between the educated and the uneducated and (ii) the economic distance between town and village, urban and rural areas. This three fold task is of special interest to the academic world of university and college teachers and students. It is for these sections of the intelligentsia to bridge the gap between themselves and the uneducated by extension lectures frequent collective contacts and cultural assimilation It is again for them to take notice of the basic social and economic stagnation of the rural areas and to do everything possible through social service groups to supplement the efforts of administrative agencies to bring about in the peasant and the agricultural labourer a change of attitude, favourable to acceptance of modern ideas techniques and values. In the absence of such intensified special efforts, whilst the number of towns participating in modern amenities and sheltering modern values may increase, the surrounding rural

areas will continue to stagnate in traditional and outmoded ways of living. In such milieus, not only will efforts to increase agricultural production not succeed, but also, caste and creed, ignorance and superstition and lack of elementary public hygiene will continue to flourish and each exert its baneful influence to the peril of democracy Along with the Press, the academic world and university alumni must also, accept responsibility for the safeguarding of civil liberties from the *onslaughts of erring governance.*

In this connection, I wish to draw attention to a very revealing social and economic survey of a village a comparative study for 1915-55 recently brought out by the Indian Society of Agricultural Economics. The village concerned is Bhadkad situated in a fertile and progressive portion of Gujerat. By fortunate combination of circumstances, the data collected in the first Survey between 1914-18 continued to be available although not embodied in any report. The re-survey was carried out under the direction of Shri Manilal Nanavati the President of the Indian Society of Agricultural Economics *under whose experienced guidance a large number of publications* have been brought out by the Society during the last decade. While in the first survey emphasis was laid primarily on the economic aspects of the village, in the re-survey, an attempt has been made to present an analysis of the social aspects also This was as a result of the recognition of the impact of social conditions on the economic factors especially in a country like ours where influence of caste and creed is still considerable. The re-survey therefore looked into all aspects of rural life, economic, social, cultural and religious and examining of economic data in the background of sociological conditions Some of the more important revelations of the survey are the following.—

(1) In spite of the population growth of nearly 25% during the last 40 years, the occupational structure *of the village has not undergone* any *material* change Opportunities for non-agricultural employment show a definite decline with the extinction of some of the hereditary occupations of village artisans and crafts-

men. The growing pressure of population on land resources has resulted in the predominance of small holdings which are on the increase, though the yields of crops show a small improvement owing to rela tively increased use of manure and chemical fertilisers and the provision of irrigation facilities through the installation of oil-engines.

(2) In regard to non-agricultural avenues of employment, a number of families, employed totally or partially in village industries has decreased by 41% thus registering the general trend of disintegration of the village economy and languishing of village industries in the country

(3) Although open money-lending on a legalised basis has almost disappeared on account of debt legislation during the last two decades unofficially credit continues to be disbursed possibly with the same unfair practices and exhorbitant rates of interest.

(4) The co-operative society of the village started in 1913 was found in a moribund condition on account of lack of proper local leadership and intelligent depart mental guidance.

(5) A similar trend to decadence is also visible in the working of the Village Panchayat, a live body keenly interested not only in routine work but also in developmental programmes at the time of the first survey, but now bereft of much of its vitality and interest even in the urgent needs of the village again owing to lack of leadership the emergence of factions and the absence of guidance from higher local self government institutions.

(6) In spite of the facilities of medical relief provided by the opening of a dispensary in the village, the health conditions have remained the same and Malaria is extensively prevalent There is hardly any conser vancy or attention to public hygiene.

(7) In the matter of housing, however a healthy trend is visible and recently constructed houses provide better air and light and have in some cases separate kitchens and bath-rooms.

(8) In the sphere of literacy and education, although increased use is being made of facilities afforded by the library and reading room, literacy has increased only by 2 per cent in 40 years, excluding the children attending the school

(9) In regard to incomes of rural families the number of the families with a surplus of income over expenditure has increased and there has also been an upward movement of the families from lower to higher income groups. The rise in prices of agricultural products during the period has helped to reduce somewhat the chronic poverty and indebtedness

(10) On the social side while caste rigidities in respect of inter-dining and inter-marriage still persist among the majority there is evidence of relaxation of other external formalities connected with social contacts amongst castes. There is comparatively greater inter-mingling among the population. Most of the old social and religious customs and prejudices are losing their importance although they persist in varying degrees with different sections

Thus a comparative study of the socio-economic conditions of the village goes to show that progress in development either in the economic sphere or in the field of social change has been slow if visible at all The survey illustrates clearly the factors that resist development and the effects of piece meal changes traditional institutions without properly conceived st[illegible] replace them.

in the First Plan for schemes of local development works, under which many villages unable to benefit from community development and national extension were enabled with their own contribution to improve their water-supply school buildings, approach roads and other amenities. What is more puzzling is that although urbanisation has progressed considerably in this part of Gujerat and a chain of small towns have sprung up which are well-developed almost on the lines of modern urban centres elsewhere with a variety of educational civic and economic institutions owing to the initiative and energy of the leading community of the region namely Patidars, the impacts of urbanisation have not percolated to the small villages surrounding these townships. The isolation of the villages from these influences, is a phenomenon calling for a special study, especially in the context of the emphasis placed on decentralisation. Shri Manilal Nanavati the President of the Society has suggested that the rural university of Vallabh Vidyanagar which is nearby, would seem to be the most suitable institution to undertake such a study and of course the suggestion will imply elsewhere.

Further the educated have a special interest in the eradication of unemployment and must devote attention and thought to the efforts made to create gainful employment through the organisation of financial assistance and technical guidance and help in marketing to small scale and cottage industries and pilot reorientation projects for the educated unemployed.

For administrators, the Plan has a special challenge. There must be in the first place a clearer understanding of the limits of the respective spheres of the politician and legislator and the administrator and executive The politician is primarily concerned with policy formulation and must not invade the sphere of the executive in the name of democracy The administrator with suitable devolution and effective review by administrative heads must be left free to discharge his responsibility for implementation of policies, free from fear or favour Moreover public contentment responds more to just and

prompt day-to-day administration than even the successful implementation of plans.

There is ample evidence, as for instance, of public con tribution towards improvements undertaken in community development, rural social welfare projects and schemes of local development works, to indicate the ripeness of the denizens of the rural areas to break away from traditional modes of life and this incipient enthusiasm for a better living must not be allowed to subside but must be fostered by every means within our power It is a healthy sign that the rural areas are no longer the happy hunting ground of the city philanthropist and social worker for the enrichment of his city-institution and that the rural population now expects its savings and contributions to be spent on the betterment of their amenities, with public funds or charity moving in a direction reverse from the traditional viz. from the city to the village

In the field of administration, sufficient attention does not appear to be paid to the organisation in detail of small industrial schemes or of the small producer as for instance, in regard to agricultural production. The proper laying out of the Rs. 200 crore for small scale or village industries allocated for the purpose in the Second Plan is organisationally an immeasurably more difficult task than that of say setting up a Rs. 200 crore iron and steel plant. There is a great deal of oom for improvement in the manner in which and the speed with which this problem is being tackled. Even small schemes take unconscionably long time on account of the multiplicity of clearing authorities involved or inexpert field administration. The organisation of greater agricultural production is in a still more unsatisfactory state There is so far no intelligent and realistic allotment of sub-targets Every unit from the smallest upwards is supposed to fulfil the national target at the flat overall rate, e g. plus 25 per cent for food grains. The assumption implicit in this that all units are uniform in all respects in potential development is too utopian or naive for words. It is not that administrative officers have not pointed this out, but their protests are brushed aside as another

manifestation of officials' stolidity defeatism and lack of imagination

That in some measure these failings exist will not be denied by the most understanding and experienced of officials champions. But it is dangerous oversimplification of life to assume that every official argument lacks substance as the result of these failings I have met many officials during the course of my extensive tours who are anxious to do their very best on a realistic basis.

With a democracy so safeguarded and nourished, I feel confident that India can pursue her historic task affecting the standards of life and welfare of 1/6th of mankind, with some hope of success, despite the handicaps imposed by the existing very low levels of income and the increasing pressure of numbers on the means of subsistence.

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ALL INDIA EDUCATIONAL CONFERENCE, MADRAS*

APART from feeling honoured, as is natural by the invitation of the All India Federation of Educational Associations to preside over this 32nd All India Educational Conference, I also feel a sense of great responsibility both because of my official position as Chairman of the University Grants Commission as well as by the consciousness that I am addressing the teachers of all groups assembled from all over India on the subjects which touch them very vitally and by their expectations that my words might be of some use or benefit to them It is needless for me to state at the outset that what I am going to say represents my personal views unless I indicate otherwise and that they do not therefore commit in any way the University Grants Commission as a whole, much less the Government of India.

The Secretariat of the Conference have been considerate enough to inform me that the 1954 Conference at Patna was presided over by Dr R P Paranjpe, now the Vice-Chancellor of Poona University the 1955 Conference at Delhi by Shri Humayun Kabir then Secretary of the Ministry of Education and Chairman of the University Grants Commission and now Minister of State, Transport and Communications, Government of India, and the 1956 Conference at Jaipur by Shri Sriman Narayan Agarwal, then General Secretary of the All India Congress Committee. They have also sent me some literature including a complete report of the Delhi Conference 1955, which I had seen before, and a copy of Shri Sriman

* Presidential Address delivered at the 32nd All India Educational Conference held at Madras on 28th December 1957

Narayan's address to the 1956 Conference Perhaps the most interesting part of the literature is the copies of the AIFEA News, which is a monthly publication of the AIFEA.

The issue of November 26 1956, reproduces the resolutions passed at the 1956 Conference several of which are important and interesting. For instance, the first resolution passed at the general session recommended to the teachers associations the formation of parent-teacher associations for securing effective parental cooperation in the education of children. The second embodies a complaint that the Second Five Year Plan has failed to make any improvement in teachers salaries and service conditions. In the Women s Education section another important resolution was passed recommending special encouragement to women to undergo professional training by way of liberal scholarships and stipends facilities for educated married women to be employed as part time workers special course of professional training for such educated married women special facilities for women to improve their academic qualifications by being allowed to appear as private candidates for various examinations and provision of free accommodation to all women teachers particularly in rural areas In the University Education section resolutions were passed recommending a more generous provision for stipends to be made by the Union and State Governments in order to enable all meritorious but poor students to prosecute their higher studies. Another resolution in this section urged that the Union and the State Governments as well as the University Grants Commission should increase their financial support to colleges and univer sities in order to provide adequate salaries for teachers in higher education in line with the recommendations of the All-India University Teachers Convention (Rs 350 to Rs. 900 for lecturers and Rs. 800 to Rs. 1 600 for professors) They re corded the opinion of the Conference that whatever be the pattern of education there must not be curtailment of the existing facilities in secondary and collegiate education and that in particular no teacher should be thrown out of employ ment in the process of transition to the new pattern

In the Teachers Training section it was recommended that in view of the impending drastic changes in the organisation of the structural pattern as well as the content of secondary education training of different categories to teachers should immediately be provided to ensure efficiency in teaching and to fulfil these objectives, a Central Board of Teachers Train ing should immediately be set up in each State.

In the Primary and Rural Education section a resolution was passed recommending the appointment of a commission to survey the position of primary education and to make recommendations in regard to the steps to be taken to ensure early attainment of universal education. Another recommendation in this section is for an amendment to the Constitution in order to put primary education in the Concurrent List of subjects.

In the Secondary Education section a recommendation was made that the possibilities of introducing objective tests in schools and colleges in India be explored and the desir ability be recognised of the assessment of students at the end of the school or college life not purely on the basis of scholastic achievements but by placing due emphasis on factors such as school and college records regularity of attendance and participation in intra and extra mural activities of the institutions. There was a recommendation in the Adult Education section that in order to develop social education in the country the schools should be reorientated so as to serve as community centres as well.

Finally a general resolution *protested against the scaling* down of the expenditure on education in the Second Five Year Plan to Rs. 320 crores out of Rs 1 030 crores originally asked for by the Central Ministry of Education.

This does not exhaust the list of resolutions passed even in the sections named *and resolutions were recorded in many* other important sections, such as in the Education of Physically Handicapped, Library section, Child Improvement Education section Sanskrit section, Indian Public and Residential Secon dary Schools section Aborigines Education section and Youth Welfare section But obviously it will not be possible for me to

touch upon more than a fraction of the total coverage in a Presidential address like this. Incidentally I notice that the last two presidential addresses occupied not more than between twenty and thirty minutes

It has not been possible for me to find out what action has been taken by the various authorities concerned to whom the resolutions must have been communicated in accordance with the usual procedure of the Conferences or whether indeed the Conference is informed in due course of the action taken by such authorities. It should be borne in mind however that in Governmental circles there is almost a continuous stream of committees, conferences, seminars and symposia on every possible aspect of education and I have no doubt that the views expressed by the teachers on all these matters are carefully taken into consideration. I shall have an occasion later to refer to a fairly comprehensive review of all such matters by the Educational Panel of the Planning Commission at a meeting held in Poona in the middle of the year Before I do so I should however like to refer to a very fundamental document which is reproduced in AIFEA News issue of 22nd July 1957 namely 'The Teachers Charter for India"

According to this issue, the 7th August 1957 was to be observed as Teachers' Charter Day on which all members of the teaching profession throughout India were asked to pledge themselves to the Teachers Charter as a guarantee of a very bright future for India the pledge of the teachers was to execute their responsibilities fully and demand a guarantee for rights to enable them to do this properly The rights include remuneration compatible with decent life, security of continuity in service adequate protection against sickness, accident and old age permission to earn in spare time additional income from supplementary occupations, compatible with the dignity of the teacher provided his legitimate duties do not suffer thereby and an effective voice in the shaping of educational policies and in the administration and control of educational institutions through their elected representatives. The responsibilities include a duty to educate the pupils in such a way that they

become sound in body and in mind elevated in soul and develop fearlessness and self initiative and self-expression a duty to reconcile the teacher s precepts with the example that he daily presents before his pupils in his own life to instil in the minds of his pupils the principles of co-operation and social service in place of the principle of competition lastly but not the least, to try and preserve and nourish all the best in the various races and cultures that have mingled in this country In regard to the Teachers Charter also, it is not clear what machinery has been devised to ensure that pledges taken are being observed in practice that the responsibilities are being discharged and that the rights claimed are being accorded.

I take it that on the occasion of this Annual Conference all these matters will receive their due measure of attention, and if necessary further consideration namely the honouring by teachers of their own accepted responsibilities and guaranteeing to them such of the rights claimed as are conceded after due consideration by the various authorities concerned.

This is perhaps the proper stage at which, without prejudice to further discussions in any quarter suggestions, recommendations or action or any modifications of existing decisions, I should briefly explain the powers and limitations of the University Grants Commission and refer briefly to some of their policy decisions affecting their proper field which might be of interest to this Conference of teachers

The University Grants Commission Act was passed in March, 1956 and brought into force from the 5th November of the same year in exercise of the constitutional power of the Central legislature to legislate on the coordination and determination of standards in universities University is defined in the Act as in addition to a university established or incorporated under a *Central Act, Provincial Act or State Act, any such* institutions as may in consultation with the University *Grants* Commission be included in accordance with the *regulations* made in this behalf under the Act There is also a provision for the application of the Act to institutions for higher studies other than universities which may be deemed to be a

university for the purpose of the Act by declaration of the Central Government on the advice of the Commission. I should add here that so far no regulations have been made in regard to the recognition of institutions as a university and no decision taken to declare any institution for higher education, other than a university as deemed to be a university for the purpose of the Act although, as to the former a few institutions have been assisted by the Commission as if they were universities and the assistance is awaiting regularisations in terms of regulations to be made and as regards the latter a recommendation has been forwarded to the Central Government to declare an important institution for higher education to be deemed to be a university for the purposes of the Act The powers and functions of the Commission include a general duty in consultation with the universities or other bodies concerned to take all such steps as it may think fit for the promotion and co-ordination of university education and for the determination and maintenance of standards of teaching and examination and research in universities. Whilst in regard to development, all universities are eligible for financial assistance from the Commission in regard to maintenance only Central universities can receive grants. It is important to bear this distinction in mind both for the purpose of segregating the Plan expenditure from the non-Plan expenditure so far as the funds at the disposal of the University Grants Commission are concerned and for a proper determination, in the case of development, of objectives which can legitimately be furthered by grants made by the Commission. The block grants needed for the maintenance of Central universities are recorded as non-Plan expenditure and are provided separately from the Plan allocations and allotments that is yearly allotments against the total Plan allocation of 27 crores. In regard to the universities other than Central universities the Commission has to ensure that no grant made by it would form part of the ordinary maintenance expenditure during the Plan period This condition is however liberally interpreted short of an infraction of the law so that

a part of the salaries *of teachers of new departments or* additional teachers as well as part of supplementary payments to teachers, are regarded by the Commission as development and not as maintenance expenditure Thus, to take an example, in the case of new departments approved by the Commission the policy of the Commission is to share 50% of the total expenditure on salaries for the Plan period In regard to the supplementary payments to teachers, 80% of the difference between the model scales of pay and existing scales of pay is borne in the case of university teachers, and there is an offer to bear 50% of such supplementary payments in the case of payments in the case of teachers in affiliated colleges.

This last matter is complicated by the conditions just mentioned in regard to matching payments either by the university or the State concerned. It is only in a limited number of cases that in the case of State universities, the university of the State concerned has agreed to bear the matching contribution of 20%. In regard to the teachers in affiliated colleges, the offer of the University Grants Commission *was made only recently There are only isolated* cases of private managements having agreed to share 50% of the supplementary payments no State having so far come forward to make any part of this matching contribution. It has even been suggested to the University Grants Commission that it should at least pay to the university concerned say 50 or 80% as the case may be so that the teachers might at any rate be partially benefitted. The University Grants Commission has not been able to accept this suggestion for the obvious reason that if once they were to agree to such an arrangement, then for all time to come universities and State Governments and private managements will regard themselves as completely absolved from any responsibility for meeting the cost *of any improvement in the emoluments of their tea* chers. In the case of affiliated colleges for women the Com mission has, however agreed to relax the conditions to the extent of advancing their share from 50 to 75%.

It is not possible to make any generalised statement in regard to the probable capacity of private managements to

find at least a part of the matching contribution demanded of them, especially in view of either inadequate numbers or the increasing restrictions on numbers to an academically defensible maximum or to the varying rules adopted by the State Governments in regard to grant in-aid to private colleges. Whilst it is true that private managements have borne the lion's share of raising funds for higher education in this country it should be realised that not a little of their contribution in the past was indirectly at the cost of low-paid teachers. But in recent years there is increasing regulation as to the maximum scales of salaries payable to the teachers of affiliated colleges and there is also a fair degree of uniformity with each university If the private managements of affiliated colleges were in future to be relieved of all responsibilities in regard to raising of funds for capital purposes or towards the maintenance of their institutions then no purpose is likely to be served by allowing them to continue to manage the affiliated colleges, which might be taken over by the State Governments If the private managements are to continue to discharge their basic functions, then they must provide economic overhead machinery for running the institutions and must continue to be charged with the responsibility of tapping sources of private charity and philanthrophy On balancing all these factors, private managements should to my mind undertake to raise at least 25% of the matching contribution, leaving the other 25% to be raised by the State in which the institution is situated.

So far as the States are concerned, as the Finance Commission have pointed out in their recent report many schemes involving matching contributions were added to the First Five Year Plan. These subsequent schemes faced the States with a choice between two evils, namely rejecting a scheme for some improvement or development or adding to their already onerous responsibilities. For understandable reasons nearly all the States chose the lesser of the two evils, i.e., endeavouring to raise additional funds somehow or the other and in a large number of cases this endeavour simply reduced itself to adding to the deficit and thus indirectly

transferring the burden to the Central exchequer These observations however do not apply to the Second Five Year Plan as in the first place such additional schemes are the exception rather than the rule and secondly, under the recommendations of the Finance Commission, which have been accepted and implemented adequate additions have been made to the resources of the State Governments to enable them to meet at least that part of the expenditure which has been included under the Revenue head of their budgets. In other words it is believed that no State need now be in a position to turn down any scheme of matching contribution such as is involved in the proposals in regard to teachers salaries referred to above for want of the necessary funds. It is worth while to bear in mind in this connection that the development expenditure of one Plan period becomes part of the non-Plan expenditure in the ensuing Plan period and that a quinquennial Finance Commission is expected to ensure that all States are placed with funds adequate enough to enable them to meet their legitimate non-Plan expenditure The last argument furnishes some answer to the question often asked of the University Grants Commission what guarantee is there that additional funds required for the supplementary salaries will be available to universities and States after the withdrawal of the University Grants Commission s share on the termination of the current Plan period? The answer then is that since such expenditure will have been turned from Plan to non Plan expenditure it will be provided as a part of the normal expenditure of a State and that money allocated in future plans for development purposes will be available for genuine schemes of development only It is my expectation that now the State authorities will ensure that the needs of the situation are met and that no retreat will be necessitated from the betterment in the emoluments of the teachers achieved during the Plan period with the help of the partial assistance rendered by the University Grants Commission.

I now turn to some general issues arising out of the resolutions of the Delhi Conference to which I have referred earlier At the outset, I should like to deal with the general

protest against scaling down of the expenditure on Education in the Second Five Year Plan. I hold that such protests are unrealistic and of no practical benefit. The determination of priorities is an essential feature of any Plan in view of the limited resources available to the State and the various allocations made in the different sections of the Plan. That as it is the Second Five Year Plan would strain the country's resources to the utmost has become abundantly clear as a result of recent developments Educationists in general and the teachers in particular may continue properly to point out dangers involved in not making an adequate provision for consolidation and extension of education at all stages. But they should also finally take note of the decisions taken at the highest level and devote some thought to the drawing up of priorities within the limit of the total allocations for Education in the Plan, just as in the Plan as a whole with its own maximum limit, such priorities have to be drawn up in all its sections. In other words the onus lies on educationists of suggesting how the approved allocations made available can be put to the maximum possible use so as to secure an optimum improvement in the educational system of the country if they are dissatisfied with the sub-allocations made within the Educational Plan or with the deployment of such sub-allocations. It is against this background that I consider that the scales for the University teachers recommended in the resolution in the University Education section are somewhat unrealistic although I do not for a moment hold that they are unreasonable

In this connection it is perhaps worthwhile pointing out that there is hardly any country in which teachers consider themselves as paid well enough To illustrate this, the *New York Times* of the 7th April 1957 carried "a distressing picture" of the life of American Public School teachers as etched by the statistics in a recent National Education Association survey conducted by Dr Hazel Davis. The main trouble the report said seems to be that people who would like to give their time to teaching have to give it to something else For example salaries are so low that about 75 per cent

of the men teachers and 17 per cent of the women have had to take on other jobs to make both ends meet. "They double as clerk, salespeople, bill collectors tutors camp counsellors even farm hands." One man reported he had been a spare time dish-washer ditch digger and truck-driver The average teaching salaries for women were nearly Rs. 1 500/ a month and for men Rs. 1 600/ per month. Then too, the teachers reported that they are called on to do a lot of other things than teach as part of their regular work which was ten hours a week on the average Such chores were listed as planning, supervising club activities, hall monitoring, collecting money for festivals and the like. The constant complaint was the too heavy pupil load they had to carry

But Dr Davis reports an encouraging theme which runs most strongly through the questionnaire replies in spite of the drawbacks, teachers love their work. All in all public school teachers seem to lead lives that interest and satisfy them in spite of their many professional troubles Apart from the pay scales, which are perhaps two or three times as high as in our country there is perhaps much in the above report that will find an echo with our teachers. In this connection I feel that exercise by teachers of the right to earn supplementary incomes should be carefully regulated perhaps without controversy in view of the relevant provision in the teachers Charter under the heading the rights" The risk of supplementary occupations being such as to be not compatible with the dignity and the legitimate duties of a teacher is the greater where the lower is the teachers scale as compared with the general level of such scales Whilst on this question I should like to draw the attention of this Conference to the fact that in the South, as also in some parts of the West, the scales of teachers salaries in the field best known to me, that of higher education are markedly lower than in the North and the East and that against the background of the limited funds that I have mentioned a while ago, the best use of available funds would all should agree be to pull up these abnormally low scales rather than to improve the already better scales to the ideal levels mentioned in the relevant resolution Apart from the theory there are two

considerations which are usually urged in regard to the improvement of teachers emoluments. The first is that of social justice and the second that of the state of demand and supply That there has been an almost continuous deterioration in the standards of the profession and consequentially in the standards of education seems to be implicitly or explicitly admitted by most students of our educational system This deterioration is bound to accelerate into a widening spiral unless effective ameliorative measures are taken, backed by the necessary efforts to raise the required financial resources. In spite of the best efforts financial resources will be limited and it is not easy to determine where preferably improvements should take place. In my view improvements must begin with college and university teachers in combination with simultaneous other measures to improve the standards of higher education amongst the other measures while agreeing with the conclusions of the last Conference that there should be no contraction of existing facilities and no throwing out of employment of teachers, all the available funds should be used for the consolidation of the educational system rather than for its expansion.

At this stage it will be worthwhile to consider the tremen dous wastage that takes place at various levels of our educational system. It is notorious that at the elementary stage the strength and attendance of children rapidly fall off with every higher standard so that in terms of literary gain the cost incurred on producing one literate child is several times more than it need be It is doubtful if this involves merely questions of quality or emoluments of the elementary teacher It involves wider social problems, such as paucity of women teachers, and calls for powerful enough efforts to bring about the reorientation of the attitude of the population especially in the rural areas where there is still an indifference towards send ing children to school. This brings me to the important question of the spread of women s education and a more deter mined pursuit of fundamental education for the citizens of the country

It will be a matter of gratification to the Conference that the resolutions passed last year under the Women s Education section have found support in the recommendations of the Educational Panel of the Planning Commission and that as a result, Government are about to appoint a Committee to survey girls and women s education in the elementary, secondary and adult stages and to report on whether the present system of education was helping them to lead a happier and more useful life Among the specific recommendations made by a sub-committee appointed by the Panel to consider the problems relating to the education of girls and women are the following proposals :—

1 Provision of free accommodation for women teachers

2. Appointment of school mothers in rural areas.

3 Award of stipends to women teachers for teacher training at under graduate level.

4 Organisation of condensed or special course of general education and teacher training for adult women

5 Organisation of refresher courses for trained women teachers who intend to take up employment or who are already in employment.

6 Award of stipends for classes VIII and IX, provided the recipients undertake to take up teaching for the period of five years at least. In view of the requirements of training personnel for rural development such as *dais* gramsevikas health visitors, etc. the sub-committee urged that greater attention be paid to enabling women of the age group of 18-35 to offer themselves for training in various fields.

7 Facilities should be provided to enable women to have the basic minimum qualifications of the 8th standard or the vernacular final to make them eligible for further training as teachers gramsevikas, midwives, health visitors, etc.

8. Financial assistance should be given to private institutions to extend their facilities for the education of the adult women to cover up the stipends for students and the cost of teaching.

It was also recommended that the possibilities of provid ing vocational and trade schools should be explored for the age group 11 17 to enable the girls to have some gainful employment.

In my inaugural address at the Student Christian Movement Conference at Guntur only the day before yesterday I have drawn attention to the vital matter of providing funda mental education to the people of our country if parliamentary democracy is to fulfil its purpose It is unfortunate in my opinion, that such provision as was made for the organisation of social or fundamental education in connection with the rural and Community development under the First and the Second Five Year Plans was or has not been not properly utilised and that there has been a tendency to use social education orga nisers for duties other than legitimate purposes It seems clear that the importance of education for citizenship is but dimly perceived by us. Such lack of perception stems from the failure to recognise the principle that the study of a subject cannot be interesting in the absence of some knowledge about its realities and in the absence of some practical experience of the facts to which it relates Since such knowledge cannot possibly be acquired by adolescents of normal school or college-going age it follows that education must be a continuing process for all citizens especially through literature and history The elements of citizenship may be taught to adoles cents, but their lessons are bound to be remote from experience since they have no direct contact with the facts with which the citizenship or economics is involved Raising the school age is no solution in such a situation. The real solution seems to consist in purposeful extension and intensification of adult education In Denmark, adult education penetrates the whole nation. A writer from Denmark has said "the period of boy hood is not the right school time Whoever is to profit by

learning must first have lived a while and paid heed to life in himself and in others, for so only does he get into a position to understand books that describe life Experience proves that the same amount of information which it takes the half-grown youth dozing on the school forms three to five years to learn, can be acquired by adults who are keen on learning and who have done practical work in the space of three to five months" The sort of education needed is not technical but liberal education, which would help a man to realise that he has not only to earn his living but also to be a good member of society Although man may be defined as a social animal, he tends to use society as far as possible to further his own ends. This tendency cannot be countered merely by enabling the citizen to develop his personality or by informing him about the main features of the civic administration. He has to be educated through the lessons of good literature and history to cultivate ideals and be able to judge between good and bad in a social sense In other words to learn to act as a member of human community

In this context, I should also like to draw attention to my observations in the course of my Guntur address to the conditions necessary for bringing about the emotional integration of the country This is essentially a matter of the achievements of social justice and recognition by the citizen that social justice is being achieved

I have said a great deal of what I thought I would on this occasion I hope that hardly any portion of it will be regarded as criticism or fault finding. But there are a few things I wish to say which may be uncharitably construed as hostile criticism. But I must nevertheless say them in discharge of my duty as a university man to speak out without fear or favour A fairly long experience of public affairs has taught me that in the conduct of life judgments have continuously to be formed on the basis of logic and reason and not of law and regulation. The judgments on which the actions of public servants in particular and everyone in general are based are not dependent on the Indian Evidence Act or arrived at by reference to Tribunals or Courts of Law If they are wrong,

an individual suffers and a public officer forfeits respect for his intelligence and confidence in his administration But he cannot be called upon by parties affected by his judgment to prove them before the parties themselves or committees of enquiry or Courts of Law, so long as he is not perverse and his bonafides is not in question.

I feel compelled to say all this because something that I said in regard to the teacher politicians of a university (and clearly this did not mean that all or even a majority of the teachers were of that category) so enraged the teachers association there as to induce them to pass a foolish resolution asking me either to prove my remarks before a committee of enquiry or to withdraw them. I have pointed out to them that the University Grants Commission and its members and Chairman are free to form judgments about any aspect of a university and to give expression to their views in an appropriate setting and to determine their policy and action accordingly I have informed the association that their request was absurd and improper and that I refuse to entertain it. Their action has only served to confirm my impression that teacher politicians have brought that University to a parlous condition.

During the course of my intensive tours in the last 15 months, covering thirty two universities and a great many important educational centres other than the headquarters of university I have received disturbing reports about the quality and attitudes of teachers in universities and colleges, but these do not even build up to a reliable qualitative much less a quantitative appraisal. I have formed the belief that a percentage of teachers, perhaps significantly large, fail to inspire enthusiasm and hold the attention of pupils or to guide them by personal contacts. Some of this inability could no doubt be corrected by the provision of the necessary facilities and incentives, but a part of it must be due to rectifiable apathy or lack of professional conscience In the absence of some systematic assessment of failure in this critical respect (such as in respect of current examination results, reputation among students, judgment of official superiors, occasional inspection)

it would be difficult to devise concrete measures for the improvement of the standards of education

As regards the load of work I think that in certain subjects e g., languages larger classes than 80 could be permitted *thus setting free the teachers time for tutorial* or seminar work. Where special care is taken as in some of the colleges with long established reputation to detect student weaknesses at the earliest stage to give special tuition and attention by continuous teacher pupil contact the results are very creditable

Examinations are an important matter but I have no time to deal with it except cursorily Responsible opinion in academic circles seems agreed that credits for class or course work and regular attendance should form a significant part of final assessment and that the present system of examinations must be modified urgently for better teaching and juster results.

Before I close I should like to add a few observations apt to be regarded as dogmatic but capable of being substantiated They are not necessarily consequential or inter connected but all I hope will be found relevant.

1 There is a great deal of holier than thou orthodoxy or downright cant or sophistry *in regard to basic education* not so much in regard to its theory as in regard to its practice I know of instances of reckless conversion of schools, almost overnight, for attracting proferred Central Government grants The principal difficulty paucity of properly trained teachers, is nearly insurmountable The integration after suitable modification of the old and the new elementary education adopted in a realistic spirit as their policy by the U P Govern ment and the Madras Government commends itself to me as worthy of consideration elsewhere

2. There is an urgent necessity of increasing residential accommodation particularly in women s colleges. Far too small a percentage of college and university students is provided for at present and that too in scarcely permissible conditions of congestion

3 Affiliations are granted to colleges far too easily by

many universities In one State affiliations assumed spectacular proportions on the eve of the last general election I would recommend for emulation the regulations and practice of the Madras University in this respect which has in my opinion resulted in higher standards in this University than in most others.

4 Available funds should be used for consolidation rather than expansion and resultant continuous dilution of already weak standards. For years to come all the needs of the country can be met out of a college and university population of 800,000 provided the percentage of passes is raised genuinely and not by gracemarks, to 85 to 90 per cent as in the United Kingdom

5 The number of holidays and vacations must be cut down to the bare minimum. We cannot afford to remain a nation of lotus-eaters

6. Standards of accommodation in sections, classes and laboratories must be carefully fixed in accordance with academic considerations and strictly enforced Professional conscience should not be drowned in political considerations which are the proper sphere of politicians and State Governments.

I conclude by wishing the Conference every success in the direction of furthering both the legitimate interests of teachers and the cause of education

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VICE-CHANCELLORS CONFERENCE*

IT was in May or June last that Dr Katre sounded me in regard to my willingness to inaugurate a Conference on Linguistics some time in the beginning of 1958 I did not have at that time a very clear idea about the composition of the Conference nor about its precise coverage I agreed nevertheless, for several reasons.

In the first place although I am neither a linguist nor a polyglot to any significant extent I have always felt interested indeed fascinated, by the study of languages not merely from the literary point of view but also from the point of view of structure I trace this interest to my Guru Professor R. K. Lagu, who took me in hand as a youngster some 50 years ago and was kind enough to let me stay with him for four or five years between 1909-1914 A good scholar and literary critic in English Sanskrit and Marathi he was also interested in linguistics although I cannot now recollect whether he recognised the science of the study of the structure of language as linguistics in those days He did refer frequently however to philology and phonetics and I recollect that in furtherance of our common interest in language study we, teacher and pupil entered together upon the study of French and German as an extra-curricular hobby even before I had passed the matriculation examination in 1912. The interest in language and language studies that was kindled thus has endured with me all these years although the heavy pre-occupations of a nearly always busy administrative and

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* Inaugural Address delivered at the Conference of Vice-Chancellors and linguists held at Poona on 7th January 1958.

public career have not permitted me to follow up that interest in any intensive or scholarly way Secondly during the incumbency of the office of Governor of the Reserve Bank between 1943 and 1949 while I stayed for the most part in Bombay I paid occasional visits to Poona to see friends and it was during one of these visits that I came to know Dr Katre and of the work that he had undertaken in connection with the preparation of a Sanskrit Dictionary in the Deccan College Post-graduate Research Institute as the Deccan College had by then become. I remember having visited the various departments of the Institute where, I might add, there are two Sanskrit Pandits well known to me I was fortunate in being able to help the work of the preparation of the Sanskrit Dictionary in its early difficult days by agreeing to the making of a small grant from the Central Government, a measure of financial assistance which has since been put on a broader and more systematic basis, calculated to see this great work through. Thirdly by a curious coincidence I decided in 1949 or 1950 to settle down in Poona after retirement from public service and I happened to select a plot of land on the bank of the Mootha Moola river right opposite the Deccan College. A still more surprising coincidence is that since a part of the house has been leased out to the Southern Command, it has had amongst the tenants to whom that portion was allotted by the Southern Command a nephew of Dr Katre s

What with one thing and another the links between Dr Katre and myself have, therefore been strengthened in recent years. It was during my visit to the Deccan College Post graduate Research Institute where I was given some idea by Dr Katre about the Autumn School of Linguistics and was shown round the Linguistics Laboratory that Dr Katre made the enquiry I have referred to earlier It will be noticed that by this time circumstances had conspired to make Dr Katre s request irresistible as I had become the Chairman of the University Grants Commission, and it is particularly in this capacity that I imagine I have been requested to inaugurate this Conference of Vice-Chancellors. That it was to be a Conference of Vice-Chancellors as well as Linguists, was

formally communicated to me only towards the beginning of November last. The Conference is being sponsored by the Poona University and a note on the Development of Linguistic Studies in India was enclosed with the invitation issued by the Vice Chancellor of Poona University The working papers on the main topics for discussions outlined in the note have also been circulated together with a detailed programme of the Conference

In view of the the history of how the Conference has come to be organized it seems clear that it is eminently a matter of prime interest to me in my capacity as Chairman of the University Grants Commission During the course of its work the Commission has had occasions to consider the proposals from the universities for the expansion or establish ment of departments of Linguistics and so far we have dealt with these proposals in the same way as we have dealt with *the other schemes of the universities namely through Scrutinising* Committees and Visiting Committees It is clear however that, in view of the comparative novelty of the subject in India, this is not a very satisfactory procedure as the necessary long-term perspective has been lacking in it. I discovered this with particular force during the course of my visit to the Annamalai University whilst dealing with their proposal to expand very considerably their departments of Linguistics on the advice of the Expert Committee of which Dr Suniti Kumar Chatterji was Chairman and Dr Katre was a member From the development angle so to speak from which the Commission looks at the proposals of universities we had some difficulty in satisfying ourselves that such ex pansion involving so much expenditure was really called for Knowing that I was to visit the Annamalai University my colleagues had assigned to me among other things, the task of satisfying myself on closer examination that the proposals of the Annamalai University were really justified It happened again by a fortunate accident that Dr Katre was still in the *University in connection with the inauguration* of the School of Linguistics which he and his Committee had promoted in the University Both the Vice Chancellor of the Annamalai

University and I took the advantage of his presence in having the proposals expertly explained to us. Dr Katre followed this clarification by sending me at my request a note on the phased development of linguistic studies in Indian universities. I also went through the proceedings of the Expert Committee on Linguistics including the introductory remarks of the Chairman, Dr Suniti Kumar Chatterji, which was as comprehensive and scholarly as one would expect, as also the report of the Expert Committee As a result of this detailed study, the Commission has on my recommendation now fully approved the proposals of the Annamalai University in regard to their department of Linguistics with special stress on the study of Tamil, and other Dravidian languages

It will have become amply clear by now from the recitals of events that I have given, that the time is now right for guiding both the universities in India and the University Grants Commission in regard to the balanced and co-ordinated development of linguistic studies in Indian universities The Conference that I am inaugurating this morning which I do with great pleasure is obviously the proper forum for considering all the issues involved in an adequate manner since the initiative has been taken by the Deccan College Post graduate Research Institute under the sponsorship of the Poona University and the Conference is attended by both linguists or linguistic scientists as well as the Vice Chancellors of the Indian universities. The note and the papers that have been circulated to the members of the Conference form a focus around which the discussions will take place. They are intended to furnish an up-to-date account of the development of linguistics in Indian universities, as elsewhere and contain only as a basis for discussion a draft programme in regard to the development of the science in Indian universities, It is *possible that as a result of the discussions there will* be some modifications in the draft programme. It will be for the University Grants Commission to consider all pending and future proposals from the Indian universities in this matter in the light of the recommendations made by this Conference

It is very probable that the actual facts of the situation

will indicate the spread of the development of this study of languages as being somewhat wider than what has been assumed for the purpose of the draft programme. For instance Dr Katre s plan of the phased programme during the next two decades makes no reference (although a later working paper does) to the work of the Institute of Hindi and Linguistics Agra under the distinguished leadership of Shri Vishwanath Prasad, who was it might be mentioned incidentally among the earliest Visiting Professors of the School of Linguistics in the Deccan College Post graduate Research Institute Then there are the schemes of the Universities of Andhra, Anna malai, and Gujarat, for the development of linguistic studies, which have also been accepted by the University Grants Commission. In the Gujarat University this is being done as part of the development of the M A. Course (two papers) in Gujarati Language and Literature and for this purpose the Commission has upgraded the Readership in Linguistics at the School into a Professorship for the subject. Moreover as I have already indicated the Commission has accepted the schemes of the Annamalai University which include as part of their Department of Linguistics research in Dravidian Philology the establishment of a Phonetics Laboratory at the cost of Rs. 3 45900/ non-recurring for building plus recurring expenditure of Rs. 30 000/- including provision for the appointment of the necessary staff consisting of one lecturer one assistant and one technician. The preparation of an etymological dictionary of Telugu a scheme of the Andhra University, was also accepted by the University Grants Commission at an estimated cost of Rs. 1 13 700/ recurring for the staff and Rs 35,000/ non-recurring for publications etc The Commission has also received schemes from the University of Aligarh and the Karnatak University in this connection The Karnatak University approached the Commission some time ago with a scheme for the development of a Department of Linguistics. The Commission has postponed the final consideration of the schemes pending the receipt of detailed information regarding the proposed department. It may be that the deliberations of this Conference will help that

University to formulate their proposals more precisely Lastly, the Aligarh Muslim University had submitted the scheme for a 'Linguistic Survey of the Khadi Boli Region to be undertaken by the Department of Hindi and Sanskrit in co-operation with the Department of Urdu The objects of the scheme were said to be (1) to standardise Hindi all over India (2) to determine the pronunciation of Hindi words in non-Hindi regions (3) to give historical unity to basic Hindi and (4) to prepare and enrich the basic vernacular for Khadi Boli. This scheme was referred by the Commission to the Linguistic Survey Committee to be set up by the Government of India for their consideration The Ministry of Education informed *the Commission that Government had dropped the proposals* to set up the Linguistic Survey Committee The Aligarh University has not since revived its request for financial assistance for the implementation of the scheme.

In connection with the work of the Conference it seems necessary to refer to Chapter 3 of the Report of the Official Language Commission issued last year entitled Indian Linguistic Scene This chapter contains valuable information in regard to (1) ways and means of promoting the development of languages between racial groups in India and history of language groups in India (2) brief needs of the valuation of the linguistic scene (3) impact of English (4) incidence of educational pursuits during the British period on Indian languages and (5) the principal components and views of the contemporary Indian linguistic scene.

It seems also necessary to refer to the report of the "English Committee" appointed by the University Grants Commission under the Chairmanship of Pandit Hirudayanath Kunzru to examine the problem of medium of instruction at the university stage and to recommend the ways and means of securing adequate proficiency in English. Copies of this report have been circulated to the members of this Conference and apart from its bearing on the question of medium the members will have noticed the penultimate paragraph in which it is urged that in the multi-lingual situation of India far greater attention should be given to linguistics in our universities and

in our teachers training colleges This paragraph points out "the learning of languages can be made considerably easier if the problems connected with such learning are properly analysed and recognized and the relationship between the various languages well understood A more widespread study of linguistics may make it possible for many of our university men and women to interest themselves in Indian languages other than their own mother tongue, as well as learning more effectively foreign languages like English. With the assistance of special techniques the use of gramophone, tape records and other mechanical devices, it will be possible to learn languages more effectively and much faster than was considered possible in the past.

I may add that at their last meeting on the 4th of December 1957 the University Grants Commission generally approved of the recommendations made by the English Committee

As the Vice-Chancellor of Poona University has pointed out, India was the first country to show the world its awareness of the importance of linguistics. Panini's grammar which is still regarded as one of the most comprehensive descriptive grammars of languages, is considered to represent the culmination of a period of considerable scholarly activity in the field of linguistics in India Since Panini, the study of etymology is going on in India, by way of the work of Commentators on scriptural writings. The discovery of Sanskrit by Western scholars was a significant event in the study of languages in that it enabled the grouping of a number of languages into an Indo-European family of languages and gave a new dimension to the science of *Philology* *Another reason why* India should develop linguistics systematically is that our *country has the widest range of languages, including the* existence of *two distinct groups, viz. Sanskrit and Dravidian* languages, and a large number of dialects. The scope for the study of languages is, therefore considerably enchanced by this fact.

The earlier leadership given by our country for the study of languages has unfortunately not been maintained in subse-

quent periods with the result that other countries chiefly United Kingdom, USA, USSR, Holland and the Scandinavian countries have gone ahead of us The present interest taken by certain universities, such as Poona and Calcutta, for the study of linguistics augurs well for the future of linguistic studies in this country And now one may hope that as a result of the Conference both the experts and administrators in the field of higher education will do everything possible to develop the science of linguistics in the universities. The study of linguistics is a growing discipline in many countries Investigations relating to different aspects of the subject descriptive, comparative, historical etc have been undertaken It would seem necessary to have some idea of their relative importance for the study of Indian linguistics. What needs urgent attention in Indian universities is however the development of techniques of study in this regard.

I began my observation by saying that I am neither a linguist nor a polyglot. I could not ever say adapting Kalidasa's lines:

Athavā kṛta-vāg-dvāre
Vaṃśe smin pūrvasūribhiḥ /
Maṇau vajra-samutkīrṇe
Sūtrasyevāsti me gatiḥ //

Vak is indeed your organ, but alas ! I have not the flexibility of thread being a kind of unpolished Mani myself !

As an administrator connected with the development of higher education I have however necessarily to take notice of the ramification and affiliations of the modern science of linguistics. We are concerned not only with the linguistic scientists engaged in developing a sound body of observations and systematic theory about language in general and about languages in particular but the development of linguistics is also a matter of vital interest to many others in the field of learning. There are the language teachers who so far have not familiarised themselves with the present state of development of the science of linguistics much to the detriment of teaching all languages. Linguistics also bring into play another section of specialisation, namely philologists occupying the middle

ground between linguistic science on the one hand and the literary and humanistic studies on the other Then there are the *psychologists* who are concerned with the application of the science of linguistics apart from theoretical psychologists concerned with the language behaviour of mankind There are also social psychologists interested in language problems and child psychologists who find the development of languages of the child most interesting then there are psychometrists who are engaged in making tests on verbal languages or tests of achievements in various language arts, as also psychiatrists who are concerned with abnormal or disordered speech. Another group of specialists who interest themselves in problems of linguistics are the social sciences group, such as anthropologists who regard language as a cardinal aspect of culture. Even the engineers, such as telephone sound engineers, have some interest in the study of linguistics on account of their solicitude to increase the suitability of various communication systems for the transmission of human speech. Although the political scientists and historians are concerned not so much with language as with national origins recent events in our country in connection with the reorganisation of the States raised quite a number of problems involving the significance of the study of language structures and language affinities. Lastly there are the philosophers who are interested in the metaphysical implications of language. It is clear in view of this that we have a wide range of specialists interested in the study of language Linguistics can now be regarded as one of the most fundamental disciplines in the social sciences. It is claimed by John B Carrol of Harvard University in his book The Study of Language' that this discipline is quite as important as the study of say Physics or Bio-chemistry in the Natural and Biological Sciences

It is possible that like scientists in many other fields linguists pursue their science for its own sake and do not seek to justify their studies by reference to possible applications In an informal conference of linguists and educationists which was promoted by the Deccan College Post graduate Research Institute in the year 1953 this question of application to

practical problems was fully considered and one important aspect of it has been mentioned in the note on the Development of Linguistic Studies in India to which I have referred earlier I cannot do better than to quote paragraph 4 of this note in order to highlight the special scope for the application of linguistics in India

"With the recognition of the importance of regional languages as media of instruction at school and university levels, the problem of linguistic communication within the country as a whole—maintaining its unity while at the same time encouraging the development of these regional languages—involves considerable applications of the science of linguistics to the problems of communication. Obviously no one language will take an overall importance to the exclusion of others The science of linguistics will be required to devise quicker and better ways of teaching languages either as the mother tongue or as a second or third language or even as a foreign language and for the preparation of the necessary pedagogical material which will suit both the adult and the non-adult groups.

In closing, I express the earnest hope that the deliberations of this Conference will result not only in the systematic development of linguistic studies in India but also in bringing together in a mesh of common understanding the speakers of the diverse tongues of our mother land. Let us claim of our modern linguists as of our ancient Rishis

Vâcam artho madhâvati (Welfare follows linguistics).

20

PROBLEMS OF TEACHING ENGLISH*

THIS Conference on Problems of teaching English has been convened by the University Grants Commission, and as its Chairman I need inaugurate it only in a formal sense, as one very vitally interested on behalf of the Commission in the results of the Conference, and not in the spirit of a somewhat mildly interested and sympathetic outsider who adds his blessings in a few general exhortations The main purpose of the Conference has already been made clear to you by the Secretary, and in the literature that has been distributed to the delegates nearly all the points that will arise for discussion have been cogently stated by the authors of the various papers. The Secretary has also circulated a note objectively summarising from the papers the main points for discussion. The significance of this Conference not only for India, but also for our neighbours in South and S E, Asia has been rightly referred to by the President.

It is perhaps necessary for removing any possible misunderstanding in the minds of the public to state that the purpose of this Conference can be differentiated from that of the conferences or seminars with apparently similar objects held within the last two years. A seminar of teachers of English was held in Nagpur last year and a reference to it is contained in Shri Dawood s paper I am given to understand that the seminar was held largely for the purpose of considering the specific aspect of the adequacy of the training of teachers of

* Inaugural Address delivered at the Conference on Problems of Teaching English at Delhi on 26th March, 1958.

English. In the course of the present Conference that will be one of the many subjects to be discussed Then, there was during the course of this year a Conference held in Hyderabad by the teachers of English, the object of which was, I am informed, to consider the methods of teaching English literature Although this matter will incidentally be referred to in the course of the present Conference it will obviously not be the principal problem that will fall to be discussed That problem is strictly academic, i.e. that of standards of teaching English both at the secondary school stage and at the University

Before I go on to make a few observations on the work that lies ahead of the Conference let me on behalf of the University Grants Commission, as well as on my own behalf, extend a welcome to all the distinguished Vice-Chancellors Professors and teachers of English, experts on secondary education, linguistic experts, Directors of Education and Public Instruction, experts on scientific, technological and professional education and many other educationists who have been good enough to attend the Conference and are ready to participate in the discussions. I am sorry that a number of Vice-Chancellors and specialists to whom invitations had been extended have intimated their inability to attend the Conference. Their presence here would have contributed very materially to the fullness of our discussions and to the correctness of our conclusions. Nevertheless, I have no doubt that after reading our proceedings they will fully associate themselves with the work of implementing any decisions that may be reached in regard to the problems of teaching English in this country

For the purpose of convenience I restate the aspects of the problem of teaching English around which the discussions in the Conference are likely to centre They are: (i) the teaching of English in the universities (ii) the teaching of English in secondary schools (iii) the training of teachers of English and (iv) the study of linguistics in India with special preference to language-teaching. In connection with various stages of

the teaching of English the Conference will also examine the possibility of using the audio-visual and mechanical aids in teaching of English e.g. charts, film-strips, records and radio that have become available and are being tried elsewhere with reported convenience and success

In a sense, this Conference represents a follow up of the work of the Kunzru Committee appointed by the University Grants Commission to examine the problem of the medium of instruction at the university stage and to recommend ways and means of acquiring an adequate proficiency in English The report of the Committee is included among the papers circulated to the delegates and the recommendations of the Committee I have no doubt, will receive due attention during the discussions During the course of the meetings of the All India Council for Technical Education and its co-ordinating Committee that were held a couple of days ago I thought I noticed a general inclination to support the findings and recommendations of the Kunzru Committee so far as they concerned the medium of instruction in higher institutions for science and technology

There is some variation in actual university practice in regard to the extent to which English as a medium has already been replaced by a regional language or is being so replaced We may take note of this variation but for the purpose of the discussions in the Conference, it will probably be not necessary for the delegates to tread on the contentious ground of the substitution of English by Hindi as the official language of the Constitution as provided by the Constitution of India or to refer except in passing to the recommendations of the Language Commission, in regard to the continuation of the use of English as the medium of instruction in institutions of higher learning and the regulation of the pace of change from English to an Indian language as the medium at the university stage This will be the case not because the subject is unimportant but because whatever one s conclusions in the matter might be the strength of the case for improving the teaching of English will remain unaffect d. Indeed it is possible to hold

that the speedier the change from English to an Indian language as the medium of instruction at the university stage the stronger will be the case for ensuring that an adequate knowledge of English is imparted to the students. With English ceasing to be the medium, the continuous and extensive indirect teaching of it involved in its use as a medium will cease and its formal teaching will, therefore have to be strengthened

I propose however to rush in where the Secretary feared to tread and to be greatly daring and to offer a few observations on this contentious issue of English vs an Indian language

If one analyses the basis of the views of those who advocate the replacement of English by an Indian language if not here and now at least as rapidly as is humanly possible one would discover that it consists of two arguments : (i) that the more such replacement is delayed, the more difficult it will turn out to be, and (ii) that the process merely involves the so-called 'development of the Indian language the lack of which is recorded only as an historic accident and a misfortune In my opinion, both these arguments are wrong. The pace of replacement of English by an Indian language as the medium of instruction at the university stage will depend on the solution of many problems, a solution which cannot be hastened at will This process will consist, in my opinion not merely in the mechanical preparation of glossaries of technical terms and of text books, particularly in science and technology but also in the preparation of teachers themselves. It should be remembered that the teachers who will be called upon to use these glossaries and text books will themselves have to habituate themselves to this vast and rapid expansion of the scope of the Indian languages concerned In addition they will be suffering from the disadvantage that they would have to absorb all this new material and make it a part of their intellectual being sufficiently rapidly and sufficiently comprehensively in order to be able to use it in their pedagogy I have never been a teacher

myself but I have a shrewd suspicion that most teachers will be appalled by the immensity of the task that this change-over will involve and if they are to respect their professional conscience they will not allow themselves to be hurried into this transformation. In attempts made in the past in this direction, there are sufficiently aweful warnings against largely futile and therefore costly experiments. Technical terms and text books are not matters of translation. They must be the natural out come of the development in the minds of those who produce text books or enrich the field of scientific and technical terms in Indian languages and that brings me to the second point.

Let us imagine an India from which all foreign languages have been banished but the indigenous languages wherein have been developed by the addition of all sorts of technical and scientific terms In such a country the difficulties of communicating with the rest of the world will have been magnified a thousand-fold and participation in the common intellectual and scientific life of the world would have been reduced almost to nil. Although I yield to none in the appreciation of the quality of the mind of the people of this country as compared with those in any other country of the world I shudder to think what would happ n to us as a result of this kind of intellectual isolation In a sense, it will be the repetition of our history but on a more painful scale until finally as in the past, the high pressure intellectual area of the world, to use a meteorological metaphor will irrupt violently into the low pressure intellectual areas of our country What I am driving at is that our primary concern should be not with the means of com munication but with the substance communicated The progress made on the frontiers of knowledge will be lost to us unless we keep open and widen and deepen the channels of communication with the more advanced world outside a world which, moreover is advancing with breath-taking rapidity If the best of Indian intellect is enabled to swim in this main intellectual current of the world then, we may hope with

confidence that they will be able to contribute significantly and massively towards the development of Indian languages If on the other hand they remain in the back waters, then they will lack even the wherewithal for developing Indian languages and even if any so called development takes place it will be entirely without vitality Frankly if a choice were given to me I should prefer to use English exclusively for my own instruction so as to be able to participate in the intellectual life of the world and be able to transmit whatever I have assimilated through the proper idioms of the Indian languages that I know enriching those Indian languages in the process. I feel sure also that any one who ponders over this subject including the young people for whom we are taking decisions and whose future we are going to affect powerfully thereby will make a similar choice In other words, the development of our languages will be more meaningful if we maximise the chances of the development of our minds This development of our minds will be impossible without extensive and reinforced resort to one of the most advanced languages of the world i.e English which opens the door to us to at least two-thirds of the current scientific and technological literature and belles lettres In this rapidly shrinking world of ours intellectual and spiritual development must increasingly be a co-operative endeavour from which no nation however gifted it fancies itself to be can afford to remain aloof Language only transmits. It is the minds of men and their experience that enrich languages and these in their turn can be enriched only by as extensive a system of inter communication as our ingenuity can devise

It is against this background that I would humbly suggest to the Conference to conduct their deliberations. With this perspective all parts of the problem will fall into their proper place and the difficulties in the way of evolving practical methods for improving the teaching of English will be reduced to the minimum

Of the subjects set down for discussion, to my mind the

most important and vital is the training of the teacher in English and adequacy of the numbers of such teachers. I shall not attempt to forestall by any expression of opinion the conclusions of the Conference in this respect. It is my expectation that they will be more or less unanimous I should however like to take this opportunity of welcoming the establishment of the Institute for the teaching of English in Hyderabad where, I hope, continuous research and experimentation will be carried *out and facilities provided in connection with the training of* teachers of English.

To some extent the problems connected with the teaching of English in this country are not different from similar problems in other countries in so far as they originate in outmoded methods of teaching failure to keep pace with current improvements and the deterioration of the apparatus of instruction on account of pressure of numbers There is sufficient material in the papers circulated to the Conference the sifting of which will enable the Conference to come to proper judgments in this respect The only point I should like to emphasise here is the one I made in inaugurating the Linguistic Conference at Poona some months ago that no teacher of any language can afford to ignore the application to language teaching of the tremendous progress that the science of linguistics has made in recent years. But the rectification of the various other physical disadvantages is of course part of the general problem of the improvement of standards of education in this country It is only necessary to stress here the fact that since English will continue to be the main gateway to enlarged learning rectification of unfavourable factors affecting the teaching of English deserves to be given the highest possible priority in the deployment of funds which one fears will continue to be restricted for many a long year

It is recognised of course that apart from the general factors which have a bearing on the observed deterioration in the standards of English in this country there are special factors in operation arising out of the change in the status of English

from first to second language in secondary education classes. Since this process has now been in operation at the secondary stage for over a generation, the deterioration in teaching and in consequent results has been cumulative. The immensity of the task of amelioration will have to be recognised by the authorities and their bias would have to be in favour of those who advocate a longer rather than a shorter period of instruction This has particular reference to the views that have been declared by the Bombay Government in favour of shorter period of instruction in English in their secondary schools It is my strong conviction that without paying sufficient heed to recognised authorities in the academic and intellectual field the Bombay Government are adhering dogmatically to a minority view which if it proves to be wrong as I am sure it is, would result in untold harm to the interests of the young people whose education at this critical stage they are providing in the secondary classes Apart from this solitary aberration it is my belief that there will be general agreement in regard to a pattern of instruction in English at the secondary school stage It is my hope that this pattern will be evolved after paying the most careful attention to the views of experts in linguistics to the experience of the teachers of English who have proved their competence and to the availability of modern aids that have been mentioned in the papers circulated to the Conference If the necessary improvement is effected at the secondary stage the problem of the teaching and use of English at the university stage will be automatically simplified and I have no doubt that an almost universally accepted pattern of teaching English will be evolved as a result of the deliberations of this Conference

Before I close I should like to express my respectful agreement with some of the wise things that have been said in the Conference papers. They are (i) in regard to training of teachers of English that a great deal of thought and planning should be devoted to this pivotal problem with a view to

evolving schemes for initial training at all levels especially the junior level as well as for in service training. In the initial period the ranks of our teachers of English should be strengthened by the temporary addition of teachers whose mother tongue is English (ii) in regard to study of linguistics as an aid to the teaching of language in general and the teaching of English in particular that specialisation in the academic linguistic field should be tempered for the current use of non specialist teacher and his pupils, and that a teacher of English must have some acquaintance with the phonetic, grammatical and lexical aspects of the Indian language which is the mother tongue of his pupils, if his teaching is to be fruitful also that although the help of linguistics may enable the total time taken to achieve the degree of success aimed at to be shortened one *should not be oblivious of the fact that the student material* will be of a fairly low average quality at the secondary education stage especially in the junior classes (iii) in regard to audio-visual and mechanical aids that they are no substitute for a well-trained teacher (iv) in regard to the content of teaching, whether English is taught as a language of expression or merely as a language of comprehension, we cannot afford to lose sight of the humanistic value of English literature It is this aspect of the use of English and not merely its utility as an instrument for comprehension of scientific and technical literature that will fortify the urge to learn without which no languag can be *taught successfully*

I shall not now detain you any longer and proceed to inaugurate the Conference with very great pleasure.

21

SEMINAR ON NATIONAL INTEGRATION

LET me add my own welcome and welcome on behalf of my colleagues on the Commission to that extended to you just now by Shri Samuel Mathai. I am very gratified as Chairman of the University Grants Commission at the response which our invitation to this Seminar has evoked As President I do not feel called upon to make any elaborate observations at this stage and I shall endeavour to give the framework against which, to my mind our deliberations will proceed.

You have heard something about the genesis of this Seminar I should only like to add in that context that the partial consideration of the subject at the meeting of the Education Panel of the Planning Commission was based on a paper on Emotional Integration drawn up by Dr V K. R. V Rao the Vice-Chancellor of the Delhi University As a matter of fact, we might have proceeded had we had the time, with a little more consideration of this matter but it was felt to be so important at that time that we, that is to say those who attended the panel meeting, decided and I think decided very wisely that the subject should receive separate and comprehensive consideration at a seminar to be convened by the University Grants Commission.

Now this response makes it clear that this matter is very much in the minds of most of us and I should proceed to say that perhaps vaguely or inarticulately it is in the minds of people at large either as a matter of instinct or in their

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Presidential Address delivered at the Inaugural Session of the Seminar on National Integration at Delhi on 16th April, 1958

reflective moments and it is this I think that makes such a Seminar worthwhile.

The basis of democracy is a floating sense of right or wrong, and good or evil in the community, as well as the organisation of the means to discover the common will that has to be supplemented by the inculcation of right attitudes. If democracy is to succeed by means of education in the broadest sense and that is why we find ourselves—we, mostly the representatives of the universities—find ourselves involved very vitally in this matter In all countries universities are recog nised as the focal point of this duty of education directly or indirectly or by a linked process involving the promotion of appropriate and effective leadership I believe that education in its broadest sense is almost identical with or at least subserves culture, again in the widest sense of the term and therefore finally in any plan that we may evolve, I imagine that we shall lean very heavily on proper cultural developments. National Integration is the ineluctable pre requisite for the fulfilment of our infant democracy and the consummation of our democracy is a matter which will be of momentous consequence for the destiny of Man having regard to the ancient history of our land and its size and its general impor tance in the scheme of things.

There are very many excellent, thought provoking and learned papers dealing with various aspects of our topic that have been supplied to you But perhaps it would be just as well to set down at least for our general discussion to follow the stages of consideration that would be found to be relevant First of course is the recognition of the problem Second is the diagnosis—what exactly the symptoms are Third the etiology that is to say the causation for what it is that has brought about what we have discovered. Fourthly the probable consequence in case we do not attend to this problem now The next is the question of prognosis or remedial measur es. Then we shall find that probably that is not enough and that we shall have to organise some preventive measures and in doing that we shall have to define responsibilities of the various institutions and the various sectors of our society and finally

we hope that all this will lead us to a plan of action involving the creation of both an ad hoc machinery as well as some permanent machinery to achieve our aims

I shall make a *few observations* by way of the *framework* in regard to the present historical scene. I am afraid I shall sound dogmatic because I shall not have time to develop my arguments. The first proposition that I should like to put forward is that never before in our pre history have we ever *achieved National Integration* and *therefore the task before* us of the present generation is indeed a gigantic one Again having regard to the developments in the world around us never before was the problem of the National Integration of India so important in the scheme of things. We should here sorrowfully remind ourselves that the partition of the country was the most signal initial shock to the freedom fighters of this sub-continent—a set-back from the National Integration which they were endeavouring to bring about for the first time and therefore it so to speak, constituted their most painful disillusionment We have authority to believe that this development almost broke Gandhiji's heart. But it highlighted the vital importance of National Integration as nothing else could have It was a kind of shock treatment administered to us by Destiny And therefore everyone responsible in this country had resolved, with all his might, that never again shall such amputation of the body politic be allowed to take place. This is the high resolve of everyone of us who devotes *some little thought to this problem.*

Then another disaster of almost comparable magnitude in favour of which the dice were loaded by an alien government, was averted by the indomitable determination and the incomparable political acumen and strategy of one man and the nearer disaster turned into a blood-less triumph. That was the integration of the erstwhile princely states That man of destiny was as you all know Sardar Vallabhbhai Patel.

Furthermore there was another danger which we may well congratulate ourselves on having dea t with capably and that was the rehabilitation of the displaced persons from the

West—a process which has almost been completed. It involved an operation extended over a period of years which reflects great credit on all concerned as it called for immense patience and understanding and wisdom and the human touch There is a similar problem but perhaps more difficult in regard to the displaced persons from the East But if politics in the raw can be kept away then we may hope for similar though perhaps less stable success in that endeavour also Further as a part of the frame work we must give some little thought to the planning that is in progress in the country That was an act of great statesmanship in its inception whatever view one may hold in regard to the correctness of its formulation or the ability shown in its execution—because there is no doubt that our Five Year Plans are a potential cement and a binding force, but we must remind ourselves that they are capable of impairing the integrity of the nation if in their particulars they are misconceived or in the details of their formulation or in their execution they are mishandled

Then I must make some reference, again as part of the frame work and not import politics into our deliberations, to the recent reorganisation of the States. It was undobtedly well meant, but to some small extent it has been a possible source of bitterness and therefore of a certain amount of weakness *As you are all aware the reorganisation was predominently* linguistic despite professions to the contrary i.e our belief to the contrary But I doubt if it had any clear objective connected with National Integration. Now it is conceivable, and indeed justifiable that the basis of the unilingual State system could be convenience of administration and maximum efficiency of the democratic form of governments. But it does not follow that there was or there is need for one State covering one language And indeed we know that so far as Hindi is concerned *that will always be impracticable i.e to say we have* more than one State in which Hindi is the regional language and therefore it might have been possible to have more than one State even for some of the other linguistic groups Looking back upon it now it is my opinion, purely a personal one

that smaller unilingual units would have been more appropriate purely from the point of view of maximum administrative success. And I feel, again looking back upon it with the hind-side of the historians, if you prefer to consider it so that we lost here a great opportunity towards National Integration. But that does not mean that I deprecate larger units. Indeed I welcome the innovation of the bigger regional aggregates, that is to say the zonal councils, leading on to final consideration of all important matters, at the federal level. I have no doubt that these matters will be considered in the light of experience and any adjustments or variations that are considered to be advisable, will be introduced At present, I have no doubt that in some of the units we have somewhat over reached our administrative resources, and that is one reason why our Second Five Year Plan in some of its important aspects, is not making as good a progress as we expected in the beginning that it would

Then there are other aspects of this matter which concern the State like class disparities. Now that is a problem which is well understood in our country and from time to time we have given expression to our intention honestly to pursue the socialistic pattern of society and we may hold that to the extent to which we shall succeed in doing so we shall be travelling towards this ultimate goal of a genuine integration of the nation. Arising out of the reorganisation I think you will find in the course of your discussion that the problems of the linguistic minorities now left assumes very great importance and we shall have to keep a wary eye on how these linguistic minorities which are now the fringes so to speak are treated in almost every State where formerly they were widely dispersed.

Then, there is the question of regional disparities which has been referred to in some of the papers. It is my view that we have not yet faced this problem of regional disparities with full understanding and courage, for fear of giving political offence to the vested interests affected I hold that neglect of this would constitute one of the greatest threats to national integration and since this neglect is avoidable and since this problem is not intractable I think it will be the business of

this gathering to give a correct lead in the matter and we expect that those who have specialised in Economics, Sociology, Statistics and so on will help us especially to formulate definite suggestions in this regard.

Also as we survey the scene we shall have to lay down the principle that one of the most important elements in the matter is relentless exposure of wrong practices. That is to say after we had laid down a plan of action there must be an agency for vigilantly watching its implementation, an agency which will not *hesitate to expose aberrations or departures from the right* policy especially the disparities between professions and practice, and rectification would have to be suggested to the authorities regardless of any narrow political or other interests. The difficulty in this matter is that as in other spheres we cannot always find out who started the trouble that is to say if some strongly entrenched group tries to fortify its own interests at the cost of other groups and a complaint is made by the other groups, there will always be a danger of other group being called a communal and sectarian one and those who start the mischief as in the case of aggression against the national frontiers often escape with a halo of glory round their head. There are other threats to National Integration and their exposure is essentially a process of education by leaders, who should be exemplars in what they preach Because the higher up a mischief starts the more extensive is its reaction on the community and the body politic.

On the whole I see no inherent difficulty in organising appropriate social behaviour in regard to this problem at least on the part of those who are truly educated and who are truly cultured There should be no difficulty on their part in defining non-conflicting orbits of self-interest and of loyalties and I hope that our deliberations will point the way to achieving this. In other words, it will be necessary on our part to face realities and then to devise remedies and not to shut our eye to them to pretend that they never existed and to formulate some kind of solution which will be based on the hard facts of the situation.

In my young days a poet addressed a few words of advice

to me which I would like to repeat here in conclusion, before I request our chief guest to inaugurate our proceedings I shall first recite the original which is in Marathi—

Pratikshani Vara jata drishti
Vyapakatara koi—
Kshitija Vartutasaha Vadhu de
Swartha-Varutaki.

The meaning is—

As you rise every moment your view gets more and more comprehensive So let the orbit of your self interest grow wider and wider like the horizon as you climb up

This is one quotation. The other one is—

Mi majhe kula maj ki jati samaja majha ka
Shri manasta devi majhi Ishwara wichahta aha.

The meaning is—

I my family my caste my society that is to say the Society to which I belong or the community (the word community is used in two senses so I try to avoid it) then mankind which I claim to be mine, and finally god head which is identical with me that should be the hierarchy of self-interest.

Now I have great pleasure in requesting Shri Humayun Kabir to inaugurate this Seminar I cannot think of anyone who is better fitted to do this honour to us that he is Minister in charge of Culture is only a recognition of his very extensive interest, spread over many years in all cultural matters and let me remind you that I regard culture in its widest sense as the true road to any kind of integration

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POST-GRADUATE TEACHERS' CLUB, DELHI*

I thank you the President of the Club for your kind welcome and you Dr Rao for your appreciative references to my newly acquired knowledge about education.

I am very happy to have this opportunity of associating myself with the work and activities of the Delhi State Post Graduate Teachers Club Although my own province happens to be higher education the obvious connection between secondary and university education is recognised on all hands and indeed from time to time some aspects of their inter-relationship form the subject matter of discussion among educationists The programme for this Education Week itself includes under the head Secondary Education on its March the subject "Co-ordination between Secondary and University Education." But apart from my official interest somewhat narrowly defined as an erstwhile Planner I have always been interested in education as one of the most important activities of our new Democracy and have always had a very keen interest in the well-being of what is universally recognised as the pivot of all educational efforts, namely the Teacher

Some idea of the purpose and history of achievements as well as of activities in the immediate past of the Teachers Club will have been gathered by those present from the Report just read out by the Secretary on the brevity of which I should incidentally like to congratulate him. Within the short compass of less than 850 words the Secretary has managed to give you

*Inaugural Address delivered at the Delhi State Post-Graduate Teachers Club on 21st April, 1958

an idea of the genesis of this ten year old Institution its aims and objects and the service that it has rendered in furnishing a forum for the discussion of important problems relating to secondary education. He has also referred to the assistance rendered by the teachers in running the Higher Secondary Scheme of Education in the Delhi State, which can rightly claim to have blazed a trail in this behalf I was particularly glad to note that this Institution recognises the importance of follow up programmes and has a forward looking attitude on the aims of education. Most discerning students of the educational scene in this country and indeed in most parts of the world, will also be touched by the delicate and almost indirect reference made to the financial worries of teachers in the context of their capacity to give of their best for realizing these aims. It is characteristic, I think, of the down to-earth realism of the teachers constituting this Institution that they refer to habits of cleanliness and a proper civic sense in the context of the intellectual and moral uprightness that they regard as the essential asset for every citizen. This realism is a part of the profound commonsense embedded in the old adage ; cleanliness is next to godliness.

The organizers of this week have been good enough to supply to me a good deal of literature concerning themselves apart from the Memorandum and Rules and Regulations. This literature comprises the Reports of the Educational Gatherings for 1950 and 1951 as well as Reports of the gathering for 1955 together with a Report on the symposium on 'Supervision in Schools held a little earlier in the same year Apparently no report is available for years 1952, 1953 and 1954 I have been furnished with only a copy of the programme for the Educational Gathering for 1956 and have been given to understand that the report has yet to be printed. I am also told that there was no Educational Gathering last year One document of very great importance has been furnished to me and that is a paper containing the 'Code of conduct for teachers as well as a 'Charter of rights for teachers unanimously adopted in the open session of the Educational Gathering on the 18th March 1951 It would appear that the printing of the proceedings of

the Education Week is often held up on account of financial difficulties. I do think that this is a great pity and that the least that Government could do to indicate their sympathy and support for the efforts of the Teachers Club is to place funds at their disposal to enable them to publish at least selected material of a permanent educational value from out of the proceedings of their Educational Gatherings generally and specific seminars and symposia

I have looked through the material that has been furnished to me and have been greatly impressed by the care taken to ensure that the range and scope of the discussions organised from time to time is as relevant and comprehensive and progressive as possible There is also an air of great earnestness about the whole affair which must delight the hearts of those who in various capacities are charged with some responsibility or the other in the matter of the improvement of our educational system

The span of activities of the Club covers a very important period indeed in the history of Indian education, beginning with the Sargent Report and extending beyond the time of the Mudaliar Report on Secondary Education to the formulation and partial implementation of the Second Five Year Plan. Maulana Azad in his Inaugural Address to the Central Advisory Board on Education at its meeting in 1955 said "I think you will all agree that this 'Secondary Education has till now been the weakest link in the Indian educational chain. It is yet in a sense decisive in determining the quality of education both at the secondary and the collegiate levels. Secondary schools supply teachers for elementary schools and students for colleges and other institutions of higher level. An unsatisfactory system of secondary education undermines the entire system of education in the country"

This is the appropriate stage for me to pay tribute to Maulana Azad whose recent passing away the nation has mourned with rare intensity and will continue to mourn I well recall a day towards the end of 1950 when he invited me to his house—I was Finance Minister of the Union then—to find out if there was any possibility of an increase in the Budget

of the Central Ministry of Education which in those days used to be about Rs. 4 crores With the achievement of the First Five Year Plan safely behind us it has now become the fashion for people in high places somewhat baffled by the dimensions of the Second Five Year Plan, to make almost contemptuous reference to the easiness of the circumstances surrounding the formulation and implementation of the First Plan But those of us who had to do the spade work in putting together the Plan and to raise the necessary internal and external resources for it know how difficult these processes appeared in those early days when the rupee had just been devalued and inflation latent in the expansion of currency during the Second World War was working itself out in a world not yet properly organised for production, both agricultural and industrial It was in this setting that all expenditure both for investment and development had to be severely curtailed and the pathetic appeal of Maulana Azad for an increase in his Budget allotment could not receive a satisfactory response until two years later when the First Plan had been put into its final shape Even then all that one could provide was a budget of round Rs 15 crores a year for the Education Ministry including Rs. 10 crores a year for development and at one time, before Maulana Azad realised that only three years of the Plan had been left, he expressed deep regret that the Plan provision for his Ministry was not atleast Rs 50 crores as he had suggested It is due to his wise and enthusiastic guidance that to-day the plans for Education and Cultural and Scientific Research in all their aspects have a wide range and massive content. For many a generation to come the educational system of our country will bear the impress of his master mind and his noble personality

One of the most statesman-like actions of Maulana Azad was the appointment of the Commission on Secondary Education, briefly referred to as the Mudaliar Commission. So comprehensive and adequate was the investigation made by this Commission and so well-judged its recommendations that with reference to this particular world one might say

Mudaliarochchishtam jagat sarvam

i.e. we have all to plagiarize from Mudaliar
as one says in regard to the ancient world with reference to the epic Mahabarata

Vyasochchishtam jagat sarvam

i.e. we all plagiarize from Vyas.

Nevertheless we live in a dynamic world and even whilst we still grapple with the implementation of some of the major re commendations made by the Mudaliar Commission, as the organisers of this Education Week have wisely recognised, secondary education is on its march and there are already new trends in evidence Some of these were discussed in the Edu cational Gatherings of 1955 and 1956, such as guidance and counselling in schools and multi-purpose schools The age-old major problems, involving deep thinking on the theory of education will of course be with us and I am glad that in addition to subjects like education in democracy or science and morality discussed in the past we are going to have during the course of this Inaugural Session an address by a distinguished teacher and parliamentarian on Education in a Welfare State.

If I may say so the programme drawn up for this Education Week is in my opinion, admirable in every respect. For tomorrow's session under the head Secondary Education on its March discussions are scheduled in regard to multi-pur pose Schools—their concept and organization co-ordination between secondary and university education, and basic educa tion—its introduction into city schools. The programme for Wednesday the 23rd April grouped under the general heading 'New Trends in Secondary Education includes addresses on experiments and projects of Delhi schools, library service in schools and development in reading habits co-curricular activities—a challenge to Delhi schools and on audio-visual aids accompanied by a demonstration No less important are the subjects arranged for April the 25th under the heading 'Guidance Programme in Schools including counselling for teachers, role of educational and vocational guidance in schools, organization of guidance services in schools and dissemination of occupational information These addresses will be supple mented by films on secondary education and guidance in

schools and there is a pleasing innovation in the organization of the Common Forum in Hindustani on 'Improving the School' fixed for April the 24th which will give opportunities for expression of their views on the matter to a student a parent, a leading public worker an officer from the Directorate of Education, a school head and a teacher Lastly there will be what is bound to be a delightful item namely inter-school cultural programme presided over by Prof Humayun Kabir Union Minister for Scientific Research and Culture, who incidentally is the Patron of this Teachers Club

Although the person who is requested to inaugurate is usually not a specialist on secondary education it is an usual act of courtesy to suggest that he should furnish some wise guidance for the better conduct of the programmes arranged. I shall take notice of the courtesy but shall regard myself as absolved from any real responsibility in the matter and shall confine myself to making a few general observations which may or may not furnish any helpful guidance to those who will be participating in the programme

The first point that I wish to make is that while it is only fit and proper that all of us engaged in different sectors, in various capacities, of the field of education should continuously study discuss and keep under view various aspects of the problems relating to education that affect or interest us, it is the duty of all of us to keep a watchful eye on the current implementation of the Second Five Year Plan and on the evaluation of measures adopted In this field two years of the Plan have already elapsed whilst he would be a bold man who would say that we have made a significant beginning or have achieved proportionate progress in regard to the implementation of educational plans There is yet a great deal of confusion and uncertainty in regard to the basic aims or vital ideas such as the Three Year Degree Course basic education or manpower calculations, to take only three examples In my particular field namely the improvement of the standards of higher educa tion, work is likely to be hampered by consciously insufficient budget allotments from year to year and by arbitrary resist ance on the part of certain quarters in the Government to the

almost unanimously accepted conclusions of academicians and educational administrators The delay in the approval of the Three Year Degree Course scheme is a standing example Although near unanimity was reached in this behalf nearly three years ago and a final approval by the Education Minister was sought to be accorded to the scheme nearly two years ago, till recently this matter was not cleared on account of unreasoning prejudice in some organs of the Union Government It is only recently that the Minister announced the final approval of the scheme but I fear that further official routine will delay implementation for many more months to come. In regard to basic education the uncertainty appears to me to be more profound because of lack of fixity and stabalization in the field of theory and the obvious lack of resources or trained personnel in the field of practice. Anyone who has even superficially followed the intermittent discussion in regard to basic education that take place would be led to doubt if there is a clear enough statement of the objective or determined enough scheme for its pursuit. Under the manpower calculations also no firm estimates would appear to have been reached a matter which must cause very serious concern to those who have to make proposals or arrangements in regard to the regulation of admission of fresh numbers to schools or colleges. The targets for professional manpower are being continuously raised leading to an almost intolerable stretch of available resources and if one were to proceed beyond the Second Five Year Plan and to devote some thought to perspective planning one would be inclined to suspect that when the actual time comes for drawing on the necessary pool of personnel one would find that the basic pre-requisites have been neglected for lack of proper calculations and that a sufficient number of the raw material for professional personnel has not been put through appropriate courses in colleges and universities. These are not matters in which individual organizations or authorities can do much to help It is a matter essentially of immediate and perspective planning and since putting in place the necessary improvement and changes in practice is a matter of years the sooner the planners devote

attention to this part of educational problem the better will it be for all concerned

Whilst on the subject of the Three Year Degree Course I should again like to congratulate the Delhi State for valuable pioneer work in this field in so far as the secondary stage is concerned and of course I should like to congratulate the Post-Graduate Teachers on the assistance that they have rendered in this behalf The Delhi University and the Delhi State have been examples to inspire others by the success that they appear to have made of this innovation more than a decade ahead of the others. Having studied in some detail the way in which higher secondary education is organised in the better schools of the Delhi State, I feel convinced that the a priori reasoning which justified this innovation has been vindicated by actual experience. The calibre of the teachers who man the higher secondary schools including 9th 10th and 11th classes, is comparable to the calibre of the university lecturers available for the old two years of the Intermediate and the present pre university class. It is possible that the higher secondary teachers have indeed somewhat of an edge on the university lecturers in that many of them would probably be found to possess the additional educational qualification of formal training in pedagogy What is more with reference to the Degree Course while the pre-university class consists of only one year of preparation all the three years course in the secondary classes is automatically constituted into an integrated period of preparation for university education for those who wish to proceed in that direction The individual classes are smaller and therefore there is greater contact between teacher and the pupil. Unfortunately there is, however one grave handicap from which higher secondary teachers are suffering and that is that their emoluments are inferior to those of university lecturers of comparable qualifications. Although the Teachers Club has throughout its 10 years career displayed admirable restraint in regard to this matter there is no reason why the public and the State should not take note of this handicap and do what they can to

remove it In the Chartet of rights for teachers all that the teachers have claimed in this behalf is just and fair emoluments, ensuring for them and their family existence worthy of their profession including housing, medical and other facilities available to public servants under Fundamental Rules I think the time has come when we should give serious thought to this question and consider if the body of teachers which is discharging so important a function in the field of education should be left with a handicap and possibly a sense of grievance which would impair the maximisation of the utility of their services

I shall not attempt to touch upon many of the interesting and important subjects that are included in the programme, but I feel that I must say something about vocational and counselling services Nearly 12 years ago as Chairman of a small committee appointed by the Rotary Club of Bombay to which I had then the privilege of belonging, I had occasion to study this question and deliver a lecture or two to students and teachers in regard to its importance. As a result of the recommendations of this committee the Bombay Rotary Club started issuing a number of career pamphlets. My efforts to induce the University of Bombay to take some interest in the matter failed then, but it is my belief that as anywhere else considerable progress has since been made in this field in the institutions under the jurisdiction of the Bombay University On account of this old interest of mine I am very happy that this subject is receiving so much attention both from the Central Government and the Delhi State authorities as well as the Teachers Club I notice that guidance and counselling have re-occurred in more than one year's programme of these Educational Gatherings as subjects for discussion. The Mudaliar Commission have dealt with great understanding and sympathy with this matter and in 1953 the Government of India organised a conference and a workshop to which professional workers in the field of counselling and guidance were invited to submit field reports I have no doubt that the matter has progressed further since then and that vocational guidance in India is no longer a neglected field of education. Indeed there is

reason to believe that vocational guidance and counselling has come to India to stay and is shaping itself gradually and firmly as an essential part of both education and the implementation policy programmes The need for vocational guidance has been recognised by the high level authorities, the basic principle of technique and methods of guidance have been worked out and suitable organizational set up has been put into position. Foreign experts who have studied the Indian Educational scheme have testified that even though vocational guidance in India may be under-developed as compared with some Western countries, the fundamental principles which underlie the deve lopment policy in this respect are well understood namely that *vocational guidance means assistance to the young individual* without impairing his own capacity and responsibility and right to judge for himself and decide on his future. The improvement of the occupational choice by a process of self appraisal and development of the personality has been accorded a place higher than mechanical tests which now occupy their proper place as the last resort in problem cases after regular methods have failed. Individuals are helped by occupational information for the gathering and furnishing of which the machinery is being steadily enlarged and improved. Plans have also been put into effect to facilitate adoption of careers decided upon with the guidance furnished and the importance of active help in placement is also realised. The most import ant fundamental principle now recognised is that vocational programmes are a continuous process and that therefore they must be a integral part of education, subject to space having been accorded to it in the curriculum of the multi purpose schools. Lastly the limitations to the doctrine of the right man in the right place or the avoidance of a square peg in round hole are well realised and it is admitted that we shall never know enough about the individuals and occupations to reach any such ideal arrangement. A more realistic purpose is now set for guidance namely to help the individual to avoid dangerous mistakes in choosing his occupation. The employment exchanges with their many ramifications have an im portant place at one end of vocational guidance and I ar- -t--

that the Director of Employment Exchanges is going to talk to this gathering on the important aspect of dissemination of occupational information. He was good enough to send me recently two Reports of Unemployment among the Educated and among Trained Teachers which were a revelation to me. I have no doubt that too much of such critical and crucial information can now be furnished both for the guidance of individuals and of educational and other public authorities.

I also feel that many will be greatly interested in another item in the programme under the head New Trends in Secondary Education concerning library service in schools and the development of the reading habit. The Ministry of Education, Government of India, have recently published a Report on a survey of Secondary School Libraries in the Uttar Pradesh which gives some valuable information bearing on this subject. Foreign scholars who visit our country are struck more by one feature of our educational system and of our student attitude than any other and that is their luke-warm regard for books and libraries. It is easy to see the incalculable intellectual jeopardy to which our country is exposed. If this trend is not corrected in time we shall soon have generations of progressively ignorant citizens who will have lost touch with the progress of thought in this and other countries. It is the duty therefore of all educational authorities to devise means by which the love of books and reading could be inculcated in our young people and therefore in due course in all our citizens.

The fundamental objective of education is to ensure that every individual is enabled to develop and fulfil himself and therefore maximise his service to the community. This is at the base of not only vocational guidance in schools but also the whole concept of the Welfare State about which I have no doubt we shall hear some wise and thought provoking observations from the speaker who is to follow me, Prof Hiren Mukerjee. The Welfare State is not based on mechanical conception of all men being equal for the simple reason that all men are not born equal and can never be equal, no matter what ability or system of governance may be adopted by the society to which he belongs. What the Welfare State implies is that the

opportunities accorded to all or available to all shall be equal and that if this equality of opportunity is denied by reason of disparities standing in the way of this objective then efforts shall be concentrated on removing these disparities. In an underdeveloped country like India it is all the more necessary that all possible talent should be harnessed in the service of the nation and this cannot be achieved unless talent is discovered at the earliest possible stage and is enabled to develop to its maximum extent, no matter what the environment and circumstances of the individual concerned may be. It is for this reason more than for any other including the proper working of the form of democracy that we have chosen by means of our Constitution that it is necessary that primary education including its higher stages affecting persons of the age group 6-14 should be spread as quickly as possible in accordance with the directive principles of the Constitution Most of the educational and political thinkers have no doubt indeed that this itself is only a stage and that in course of time the modern State must provide for free and compulsory education for all its citizens upto the age of 17 years. It is this that invests secondary education in India as well as in any other countries of the world with its supreme importance.

I have great pleasure in inaugurating this Education Week and I am confident that its deliberations will help towards the realisation of the high aims and purpose that we have all at heart via this important road of higher secondary education in the supreme task of building up our country and enabling it to play its proper role in achieving world prosperity and therefore world peace

HINDI ADDRESSES

(The translation in English of these addresses is also given after the Hindi text)

1 भारतीय संस्कृति सम्मेलन*

उपस्थित महिलाओ और सज्जनो !

मैं आपका अत्यन्त आभारी हूँ कि भारतीय संस्कृति सम्मेलन के इस प्रथम अधिवेशन के अवसर पर सभापतित्व ग्रहण करने का निमन्त्रण देकर आपने मुझे सम्मानित किया । मैं थोड़ी-बहुत संस्कृत भाषा जानता हूँ और संस्कृति के व्यापक तत्त्वों से भी मेरा यत्किंचित् परिचय है । लेकिन मैं अधिकारपूर्वक यह नहीं कह सकता कि सांस्कृतिक विषयों का मैंने विशेष और वैज्ञानिक अध्ययन किया है । इस अवसर पर आप मुझ से क्या अपेक्षा करते हैं मैं नहीं जानता । तथापि इस सम्मेलन जैसी सांस्कृतिक संस्था के समक्ष कौन-सा प्रयोजन हो इसी प्रश्न से सम्बन्धित विषयों पर मैंने कुछ मनन किया है और वही विचार मैं आपके सामने प्रस्तुत करूँगा । अपना अभिमत निवेदन करने से पूर्व मैं आपके सामने अपने विचारों की पृष्ठभूमि स्पष्ट करना भी आवश्यक समझता हूँ । इन विचारों की सृष्टि मानव-संस्कृति के मूल लक्षणों और भारतीय संस्कृति की विभिन्न धाराओं के विकास के अध्ययन के आधार पर हुई है । सम्मेलन के प्रचार और उसके कार्य-निष्पादन की भावी दिशा का सम्यक् निर्धारण करने के लिए, मेरे मत से यह दृष्टिकोण आवश्यक है । इस स्थापना में मुझे इस क्षेत्र से सम्बन्धित विशेषज्ञों के कृतित्व का ही सहारा लेना होगा । इस अवसर पर कालिदास के एक विख्यात श्लोक में थोड़ा अन्तर करके मैं भी कह दूँ —

> अथवा कृतवाग्द्वारे कार्येऽस्मिन् पूर्वसूरिभिः ।
> मणौ वज्रसमुत्कीर्णे सूत्रस्येवास्ति मे गतिः ॥

निवेदन-रूप में आप मुझे यह कहने की आज्ञा दें कि नर्मदा की घाटी में सम्पन्न होने वाले इस सांस्कृतिक सम्मेलन का सभापतित्व करने में मुझे अपार हर्ष की अनुभूति हो रही है । इस घाटी की स्मृतियाँ मेरे अध्यापन-काल के

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* प्रथम वार्षिक अधिवेशन के अवसर पर सभापति-पद से पिपरिया (मध्यप्रदेश) में दिया गया भाषण, १० नवम्बर, १९[illegible]

दिनों से मेरे मानस से संश्लिष्ट है। पुरातत्त्व की दृष्टि से यह घाटी प्रातिनूतन युगीन स्तनपायी प्राणिजात पुरा-पाषाणयुगीन सामग्री तथा ५०० ००० वर्ष प्राचीन प्रस्तर उपकरणों के लिए विख्यात है। यह सामग्री प्राय उसी युग की है जब कि सर्वप्रथम मनुष्य का पृथ्वीतल पर आविर्भाव हुआ। एक पुरातत्त्व वेत्ता का कथन है हमारे इस नक्षत्र पर "भूत वर्तमान और भावी का समस्त जीवन यदि घड़ी के २४ घंटों में विभाजित किया जाय तो प्रकट होगा कि मनुष्य केवल डेढ़ सैकिण्ड पहिले ही अस्तित्व में आया है।

हमारे पूर्वजों ने सौर-संहति की आयुर्गणना का जो चमत्कारपूर्ण कार्य किया है वह आज के वैज्ञानिक अनुमान से आश्चर्यजनक रूप से सादृश्य रखता है। इस अनुमान के अनुसार सौर-संहति की आयु तीन सहस्र लक्ष वर्ष निर्धारित की जाती है।

अब मैं जो कुछ आपसे निवेदन करूंगा उसकी स्थापना में मैंने रूथ बनेडिक्ट से बहुत कुछ लिया है। रूथ बैनेडिक्ट अन्तर्राष्ट्रीय ख्याति की नृतत्त्व शास्त्रवेत्ता हैं। उन्होंने 'संस्कृति के रूप एवं प्रतिमान' 'प्रजाति और प्रजातीयतावाद' इत्यादि विषयों पर ग्रन्थ लिखे हैं। उनके 'प्रजाति और प्रजातीयतावाद' नामक ग्रन्थ में अनेक उद्धरण हैं जिनका मैंने मुक्तहस्त से प्रयोग किया है परन्तु स्थान और काल की मर्यादा को देखते हुए विभिन्न स्थलों पर प्रयुक्त होने वाले सभी उद्धरणों के मूल स्थान का उल्लेख करना मेरे लिए सम्भव नहीं हो सका है। प्रसंगतः यह उल्लेख इसलिए किया गया है कि जिन विचारों की अभिव्यक्ति यहाँ की जा रही है उनकी मूल प्रेरणा की जानकारी प्राप्त करने के आकांक्षी विद्वान् उसका संदर्भ जान सकें।

चूंकि जैविक परिवर्तन अत्यन्त मन्थर गति से सम्पन्न होते हैं और सांस्कृतिक परिवर्तन प्रत्येक पीढ़ी में घटित होते रहते हैं इसलिए संस्कृति के प्रतिक्षण परिवर्तनशील आदर्श को प्रजातीयता के स्थिर मूल्यों के संदर्भ में विचार करने का प्रयास निरर्थक होगा। यह स्पष्टीकरण प्रजातियों के पारस्परिक सम्पर्क व्यक्तिगत प्रतिभा एवं भौगोलिक स्थिति के संदर्भ में तो किया जा सकता है, किन्तु प्रजातीय विभिन्नता के आधार पर कदापि नहीं किया जा सकता।

सभ्यता का विकास और विस्तार प्राय प्रजातीयता के प्रति सर्वथा प्रशान्त भाव से उदासीन रहा है। जिन समुदायों को सभ्यता का सृजन करने का अवसर प्राप्त हुआ है उन्होंने न केवल सभ्यता को प्राप्त ही किया है वरन् उसकी अन्तर्वस्तु में सम्वर्धन भी किया है। इसके विपरीत किसी भी समुदाय

से बाह्य सम्पर्क से पृथक रह कर कभी भी किसी समृद्ध एवं सामाजिक संस्कृति का विकास नहीं किया।

यदि हम एक बार इस निष्कर्ष को स्वीकार कर लें कि प्रजाति अपने केवल मात्र अविकल्प अर्थ में अर्थात् जैविक अर्थ में भाषाओं तथा संस्कृतियों के इतिहास के प्रति सर्वथा उदासीन रही है और उनका उससे उतना ही सम्बन्ध है जितना भौतिक एवं रसायन-शास्त्र के सिद्धान्तों का तो हमें एक सुलझा हुआ दृष्टिकोण प्राप्त हो जाएगा जिसके आधार पर हम स्लावोफिलिज्म एंग्लोसैक्सनवाद, ट्यूटनिज्म और नाज़ीसी प्रतिमा जैसे रहस्यवादी नारों से अभिभूत होने के बजाय उनके यथार्थ को भली भाँति समझने में समर्थ हो सकेंगे। मानवीय कृतित्व तथा सिद्धियों के प्रासाद अन्तर में यदि हम तथाकथित प्रजातीयतावाद का स्पष्टीकरण खोजने लगेंगे तो इसे या तो भ्रम की संज्ञा देनी होगी या यह हमारे मानसिक दिवालियेपन का ही सूचक माना जायगा।

यह धारणा कि प्रजातियाँ अविभाज्य मौलिक श्रेणियाँ हैं—केवल हमारी कपोल-कल्पना है।

प्राणी जातियों में जिस प्रकार की विभिन्नताएँ हैं, मानव जातियों में उतनी स्पष्ट एकरूप और स्थायी विभिन्नताएँ नहीं हैं। जो कुछ विभिन्नताएँ परिलक्षित होती भी हैं, उनमें कमी-बेशी होती रहती है और अनवरत श्रेणी-क्रम के द्वारा उनका एक-दूसरे में समाहार होता रहता है।

प्रत्येक अभिलिखित सभ्य समुदाय किसी न किसी स्तर पर वर्णसंकर समुदाय रह चुका है इस स्थापना से यह सिद्धान्त गलत सिद्ध हो जाता है कि वर्णसंकर जातियाँ शुद्ध रक्त वाली जातियों की अपेक्षा घटिया होती हैं।

विभिन्न जातियों में परस्पर कोई विशिष्ट एवं सार्वभौम वैर-भाव विद्यमान है ऐसी कल्पना को मस्तिष्क में स्थान देने की आवश्यकता नहीं वरन् इस धारणा के विरुद्ध यथार्थ यह है कि यह वृत्ति बिलकुल ही विद्यमान नहीं है। इसे सत्य प्रमाणित करने के लिए प्रतिष्ठावाली और सुनिश्चित साक्ष्य उपलब्ध है। प्रजातिगत विरोध का समुचित स्पष्टीकरण प्रवृत्तियों और प्रेरक हेतुओं में सन्निहित है। प्रजातीयता से उसका लेशमात्र भी सम्बन्ध नहीं। ये प्रवृत्तियाँ और प्रेरक हेतु अपने मूल रूप में यद्यपि प्रजातिगत नहीं होते परन्तु दूसरी प्रजातियों के लोक-मानस से अनुस्यूत होकर प्रजातीय विरोधता का रूप अवश्य धारण कर लेते हैं। जिस समय ऐसी भाव निष्पत्ति हो चुकी होती है तो उस प्रजाति के किसी भी सदस्य से सम्पर्क होने पर यह भाव प्रजातीय विरोध के रूप में इतनी प्रबलता के साथ प्रकट होता है मानो कि

यह अन्तस्स्फूर्त बैर-भाव ही हो। वह समाज-विज्ञानवेत्ता जो कि, मानव समाज के वर्तमान विकास से सन्तुष्ट है सम्भवतः *वर्णसंकरता के सिद्धान्त* को स्वीकार न करे, लेकिन उसकी इस मान्यता का औचित्य अधिक से अधिक सामाजिक आधार पर ही सिद्ध किया जा सकता है। किन्तु यदि वह यह सोचने लगे कि जैविक ह्रास के कारण वर्णसंकर जातियों का एक दिन पृथ्वीतल से लोप हो जाएगा तो यह धारणा निर्मूल होगी।

ब्राजील के एक राजनीतिज्ञ का कहना है कि दक्षिणी अमेरिका के लोगों ने अनुभव से यह सीखा है कि प्रजातियों के अन्तर्मिलन से उत्पन्न होने वाली सम्भावना जितनी यथार्थ होती है दूसरी कोई सम्भावना उतनी यथार्थ नहीं हो सकती। सम्भवतः इसीलिए प्राणिशास्त्रवेत्ता निस्संकोच भाव से यह घोषणा कर सकते हैं कि मानव-समुदायों के शारीरिक लक्षणों का उनकी सांस्कृतिक सामर्थ्य से जो कुछ सम्बन्ध है तद्विषयक समस्त उपलब्ध एवं *प्रामाणिक ज्ञान केवल एक डाक के टिकट की पुश्त पर लिखा जा सकता है।* व्यक्ति और व्यक्ति के मध्य विद्यमान नैसर्गिक विभिन्नताओं को छोड़कर जहाँ तक वास्तविक महत्त्व के लक्षणों का सम्बन्ध है—ऐसा स्वाभाविक प्रजातिगत वैभिन्न्य कालान्तर में समाप्त हो जाता है और यह क्रिया इतने अलक्षित भाव से सम्पन्न होती है कि औत्पत्तिक विकास सम्बन्धी तटस्थ विज्ञान भी इसे अपनी प्रक्रिया में समाविष्ट नहीं कर सका है।

वैज्ञानिक लोग भी अभी यह निश्चय नहीं कर सके हैं कि आनुवंशिक विभिन्नताएँ मनुष्य की प्रज्ञा में भी वर्णभेद उत्पन्न करती हैं अथवा नहीं तथापि इस सत्य से इन्कार नहीं किया जा सकता कि इस प्रक्रिया से सामाजिक पर्यावरण का निकट सम्बन्ध है। इसलिए यह स्वीकार करना होगा कि बुद्धि के सामान्य स्तर के सम्बन्ध में औत्पत्तिक प्रणाली से अधिक *पर्यावरणात्मक प्रभाव ही काम करता है। सामाजिक एवं नैतिक तत्त्वों का* मानव-मन पर प्रभाव पड़ता है बहुधा इस सत्य से लोग पलायन करते हैं परन्तु जिस समय यह कहा जाता है कि आचरण एवं चारित्र्य सम्बन्धी अन्तर नैसर्गिक आनुवंशिक विभिन्नताओं पर निर्भर करते हैं तो इससे अधिक बौद्धिक हीनता का परिचायक और कुछ नहीं हो सकता। किसी भी समुदायगत विशेषता का अनुसन्धान करते समय लोग जब लौकिक पर्यावरण सामाजिक पर्यावरण अथवा ऐतिहासिक परिस्थिति का जायजा न लेकर वरन् केवल उसे प्रजातिगत विशेषता कह कर संतोष कर लेते हैं, तो ऐसे अनुसन्धानकर्त्ताओं के स्पष्टीकरण को या तो अज्ञान अथवा प्रमाद ही कहा जा सकता है। माता पिता एवं बच्चों के मानसिक सादृश्य में वंश-परम्परा से प्राप्त संस्कारों के

प्रभाव को स्वीकार किया जा सकता है परन्तु इस तर्क को सम्पूर्ण राष्ट्रों के आचार-विचार सम्बन्धी एकरूपता का आधार कदापि नहीं माना जा सकता क्योंकि यहाँ इस प्रभाव की परिणति बहुरंगी होती है।

समाज द्वारा प्रभावित होकर ही हम आचार-विचारों के विशिष्ट ढांचे का धारण करते हैं। सांस्कृतिक विभिन्नताएँ हमारी परिस्थितियों की तात्त्विक अनुसृष्टि होती है जो कि बाह्य परिस्थितियों के घात प्रतिघात से उत्पन्न होती है और इसी प्रणाली से वे विलुप्त भी हो जाती हैं। प्रजातिगत नैतिक विशेषताएँ आनुवंशिक निसर्ग तात्त्विक चारित्र्य और मस्तिष्क रचना का परिणाम नहीं होतीं और न ही पार्थिव उत्पत्ति के नियमानुसार पिता के द्वारा पुत्र को प्राप्त होती हैं। इसके प्रतिकूल जिन आचार-विचार सम्बन्धी विशेषताओं से प्रजातियों में भेद किया जा सकता है उनका पता तो इन जातियों की सामाजिक व्यवस्था से ही लगाया जा सकता है और इस सामाजिक व्यवस्था के परिवर्तन के साथ ही उनमें भी परिवर्तन हो जाता है। व्यक्ति-व्यक्ति के *पाण्डित्य में अन्तर हो सकता है परन्तु पाण्डित्य प्राप्त करने की क्षमता सभी में* समान रूप में विद्यमान होती है। दुनिया में कोई प्रजाति ऐसी नहीं है जो तर्कसम्मत प्रयास द्वारा अपने को सुसाध्य नहीं बना सकती। यदि हम मेधावी कल्पनाशील साहसिक और भावनात्मक रूप से सम्पुष्ट मानवता के सुदीर्घ पथ का निर्वाचन करने बैठें तो समस्त प्रजातियों को प्रतिनिधित्व देना अपरिहार्य हो जाएगा। समस्त मान्य मानव-विज्ञानवेत्ता उस प्रजातिगत मनोविज्ञान के विद्वेषपूर्ण असर्गलवाद का खंडन करते हैं जिसका प्रचार और प्रकाशन अल्पसंख्यक जातियों पर किए गए अत्याचार को न्याय्य सिद्ध करने के लिए ही अधिक किया जाता है। दक्षिणी अफ्रीका में ऐसा ही हो रहा है। प्रजाति-सम्बन्धी राजनीतिक परिभाषाओं का मुख्य प्रचार के साधन से अधिक कुछ भी नहीं और इनका आविष्कार सैनिकीकृत जनता के अपरिपक्व मस्तिष्कों को संतोष प्रदान करने के लिए किया जाता है। प्रजातिवाद को मिथ्याभिमान आत्मसम्मान और लिप्सा को प्रोत्साहित करने का ऐसे विश्वासों द्वारा साधन बनाया जा रहा है जो कि श्रुतिमधुर भले ही हों परन्तु यथार्थ के सर्वथा विपरीत हैं। अधिक से अधिक प्रजाति दुराग्रही विश्वासों को उग्र राष्ट्रीयतावाद अपरिपक्वता अनुभवहीनता तथा व्यक्तित्व की बौद्धिक दरिद्रता का ही सूचक माना जाएगा। किसी एक प्रजाति के लाभ अथवा हानि में दूसरी सभी प्रजातियों का समान योग होता है। पौर्वात्य एवं पाश्चात्य सभ्यताओं में कोई दुर्निवार संघर्ष नहीं है। यह भी आवश्यक नहीं कि वे एक दूसरे की प्रतिद्वन्द्विनी ही हों वरन् इसके प्रतिकूल ये सभ्यताएँ एक दूसरे की सम्पूरक हैं। आज

एक किसी नीग्रो अथवा अफ्रीकावासी ने अपने जीवन की परिस्थितियों में सुधार करने की चेष्टा करना तो दूर, जब कभी अपने सामाजिक स्तर को गति देने उसे ऊँचा उठाने अथवा उसमें सुधार करने का प्रयत्न किया है तो प्रतिरोध में उसे सदैव ही उत्तेजित विद्वेष भावना का सामना करना पड़ा है। इतना ही नहीं कभी-कभी उसे दुर्दान्त अत्याचार एवं रौद्र प्रजातीय घृणा का शिकार भी होना पड़ा है। इस प्रकार का कल्पित प्रजातीय पूर्वाग्रह मनुदारता वाद की ही अभिव्यक्ति करता है। निस्संदेह प्रजाति का एक गम्भीर सामाजिक महत्त्व है। भूल यह की जाती है कि उसे सांस्कृतिक मर्यादा का प्रतीक मान लिया जाता है और उसके द्वारा निर्बलतर दल के शोषण को न्यायोचित ठहराया जाता है, जिसके अपरिहार्य राजनीतिक एवं सांस्कृतिक परिणाम निकलते हैं। प्रजाति को सांस्कृतिक स्तर का प्रतीक स्वीकार कर लेने के बाद व्यक्तियों का स्वयमेव वर्गीकरण हो जाता है और इस प्रकार हम उनके स्वातन्त्र्य को सीमित कर देते हैं और उनके सांस्कृतिक मूल्यों पर बन्धन लगाकर उनकी प्रगति को पराङ्मुखी बना देते हैं। किसी एक प्रजाति एक राष्ट्र अथवा वर्ग को शासन करने का ईश्वर प्रदत्त अधिकार प्राप्त है—इस मान्यता की निराधारता को वैज्ञानिक शोध अनायास ही सिद्ध कर सकते हैं।

एतदर्थ समस्त मानवीय विभिन्नताओं को प्रजातिवाद पर आधारित नहीं किया जा सकता। मनुष्य की मूल प्रवृत्ति पक्षी अथवा कीटियों जैसी नहीं होती और न ही अनिवार्य रूप से उससे उनके सम्पूर्ण जीवन-दर्शन की स्थापना होती है। मनुष्य ने अपने मानस को विकसित किया है ताकि उसकी बुद्धि पूरी उड़ान भर सके। अन्य किसी भी प्राणी की अपेक्षा पर्यावरण की मनुष्य पर अधिक पूर्णता तथा तीव्रता के साथ प्रतिक्रिया होती है। तथापि किसी एक व्यक्ति पर पर्यावरण का प्रभाव उसके जीवन-वृत्त तक ही सीमित होता है। सभ्यताओं की समानता में यह यद्यपि बहुत नगण्य है। सभ्यता के विकास क्रम में विशेष प्रभाव सतत रूप से पीढ़ी-दर-पीढ़ी निष्पन्न होते रहते हैं। लेकिन इस अवधि की दीर्घकालिकता एवं अल्पकालिकता के बावजूद समाज द्वारा मानवीय वस्तु को सदैव ही अनेक रूपों में प्रभावित किया जाता रहा है। क्योंकि मनुष्य यूथवृत्ति प्राणी है और वह अपने हर कार्य के लिए अपने सहवर्तियों की स्वीकृति चाहता है बशर्ते उसे पहले अपने जीवन को सुरक्षित रखने के साधन प्राप्त करने में सफलता प्राप्त हो गई हो। उसका समाज यदि विजयाभिमान को स्वीकृति प्रदान करता है तो वह अपने को विजयाभिमान में दत्तचित्त कर देगा यदि उसका समाज धन को मान्यता देता है तो वह अपनी सफलता का मूल्यांकन डालर और सेंट या पौंड, शिलिंग पेंस

या उसे-जैसे के रूप में करने लगता है यदि समाज जाति को सम्मान्य समझता है तो वह प्रत्येक क्षेत्र में अपनी जन्मना प्राप्त स्थिति के अनुकूल ही आचरण करता है।

केवल कलाकारों लेखकों तथा अत्याचारी शासकों के परम्परा-विरोधी अपवादों को छोड़कर किसी भी अखण्ड सभ्यता में अधिकांश व्यक्ति सांस्कृतिक संस्थाओं द्वारा प्रस्तुत किए जाने वाले सांचे में ही ढल जाते हैं। किसी भी एक समाज के अन्तर्गत विद्यमान सामाजिक संस्थाओं को प्रजातीय प्रतिभा की अपरिहार्य अभिव्यक्ति नहीं कहा जा सकता क्योंकि यह सम्भव है उसी के समान दूसरे समाजों ने पूर्ण रूप से विभिन्न प्रकार की सामाजिक संस्थाओं की स्थापना की हो। जैसे कि कुछ स्थितियाँ प्राप्त करने के पक्ष में परिस्थितियाँ प्राचीन काल से लेकर आज तक भारत ही क्या सम्पूर्ण विश्व में कभी एक स्थान पर और कभी दूसरे स्थान पर अनुकूल रही हैं। भारत से बाहर आधुनिक युग में स्वाधीनता एवं समृद्धि के युग समय-समय पर रहे हैं तथापि उनकी प्रवृत्ति आध्यात्मिक या बौद्धिक जीवन अथवा कलात्मक सृष्टि की ओर उतनी उन्मुख नहीं रही है जितनी लौकिक तत्त्वों पर विजय प्राप्त करने तथा धन-सम्पत्ति के संचयन की ओर। इन क्षेत्रों में मनुष्य ने आधुनिक युग की महान् एवं आश्चर्यजनक सफलता के सीमा-चिह्न स्थापित किये हैं और इस प्रकार के साहसिक कार्यों का सम्पादन करने के लिए जैसे व्यक्तित्व की आवश्यकता हो सकती है वह प्रवर्धमान होता रहा है भले ही एक के बाद दूसरे राष्ट्र में इस व्यक्तित्व के अपेक्षाकृत विभिन्न रूपभेद हो गए हों। सभ्यता के इतिहास पर हम जहाँ कहीं भी दृष्टिनिक्षेप करते हैं हमें पता चलता है कि सुविधा-प्राप्त समूहों को जब कभी आर्थिक परिपूर्णता और कुछ क्षेत्रों में अवसर का उपयोग करने की स्वाधीनता प्राप्त हुई है उन्होंने शानदार, किन्तु अल्पकालिक सफलता प्राप्त की है। जिस समय ये अनुकूल परिस्थितियाँ समाप्त हुईं तो दुनिया को रोशनी दिखाने वाली मशाल उनके हाथों से छूट गई है। आधुनिक राष्ट्रों में उत्तरोत्तर बढ़ती हुई साक्षरता मताधिकार की प्राप्ति और एक छोर से लेकर दूसरे छोर तक समान विचारों के प्रचार के कारण सीमित सामाजिक अवसर प्राप्त होने का सिद्धान्त उतना संतोषपूर्ण कार्य नहीं करता प्रतीत होता जितना प्राचीन काल में करता था। हालांकि समस्त विश्व में दास मनोवृत्ति का विधिपूर्वक उन्मूलन हो चुका है तथापि बहुत से देशों में आज भी बहुजनसमाज जीवन की आवश्यक सुविधाओं से वंचित ही है। अभी तक सामान्य जनता को आर्थिक परिपूर्णता प्राप्त नहीं हुई है इसलिए आवश्यक स्वाधीनताएँ, जैसे कि काम करने का अवसर, विवादास्पद विषयों पर मत

प्रकट करने की स्वाधीनता तथा नागरिक स्वाधीनताओं के समान रूप से उपलब्ध होने की बात अभी बहुत दूर है। यदि हम मानव प्रजाति के भविष्य के यथार्थ हितैषी हैं तो हमें ऐसी सामाजिक परिस्थितियाँ उत्पन्न करने में सफल होना पड़ेगा जिनमें रहकर मनुष्य अपने स्वरूप की परिपूर्ति पा सके।

दिसम्बर सन् १९३८ में अमेरिका की नृवंश-शास्त्रीय सभा द्वारा स्वीकृत एक प्रस्ताव में यह स्वीकार किया गया था कि 'आर्य' और 'सेमिटिक' संज्ञाओं में कोई प्रजातीय विशेषता नहीं है, इनसे केवल भाषा-परिवारों का बोध होता है और मानव-शास्त्र ऐसा कोई वैज्ञानिक आधार प्रस्तुत नहीं करता जिसके द्वारा प्रजातीय हीनता धार्मिक अनुयायिता अथवा भाषात्मक उत्तराधिकार के आधार पर किसी जनता के विरुद्ध भेद भावना को न्यायोचित ठहराया जा सके। इस समय के आस-पास अमरीकन मनोविज्ञानवेत्ताओं ने मानव समूहों का जो वैज्ञानिक खोजपूर्ण अध्ययन किया है उससे ऐसा कोई निर्णायक साक्ष्य प्रस्तुत नहीं होता जिसके आधार पर यह कहा जा सके कि निजी बुद्धि और उत्तराधिकार में प्राप्त वैयक्तिक विशेषताओं में प्रजातीय अथवा राष्ट्रीय अन्तर होता है। उनका निश्चय यह था कि किसी भी व्यक्ति को इस कारण हीन नहीं मान लेना चाहिए कि वह अमुक मानव समूह का सदस्य है।

इसी समय के विशिष्ट प्राणिशास्त्रवेत्ताओं ने अपनी सातवीं इण्टरनेशनल जैनेटिक कांग्रेस के अवसर पर घोषित किया कि मानवजाति का प्रभावकारी औत्पत्तिक विकास मुख्यतः उसकी सामाजिक परिस्थितियों के परिवर्तन और मानवीय प्रवृत्तियों के तत्सम्बन्धी परिवर्तन पर ही निर्भर करता है और अलग अलग व्यक्तियों के वास्तविक मूल्य का अनुमान लगाने और उनकी परस्पर तुलना करने का कोई भी मान्य आधार उनकी आर्थिक एवं सामाजिक परिस्थितियों पर विचार किए बिना स्थिर नहीं किया जा सकता। वास्तविकता यह है कि ये ही परिस्थितियाँ लोगों को जन्मना विरासत में प्राप्त हुए अलग अलग सुविधाओं वाले वर्गों में विभाजित करने की बजाय सर्व-साधारण के समक्ष समान अवसर प्राप्त होने की ही सुविधा अधिक प्रस्तुत करती है। इसी प्रकार केवलमात्र यह आकांक्षा करने से कि हमारी भावी पीढ़ियों का अपेक्षाकृत अधिक समृद्ध पालन-पोषण हो—यह कार्य सम्पन्न नहीं हो सकता जब तक कि माता-पिता को बच्चे पैदा करने तथा उनका पालन-पोषण करने सम्बन्धी आर्थिक सुरक्षा उपयुक्त परिमाण में प्राप्त न हो और जब तक उन्हें पर्याप्त मात्रा में आर्थिक भैषजिक शिक्षात्मक सहायता प्राप्त न हो ताकि हर नया आने वाला बच्चा उनमें से किसी एक को भी भारस्वरूप न प्रतीत हो। इन उद्देश्यों की उपलब्धि तब तक नहीं हो सकती जब तक उपभोक्ता और कामगर

दोनों के लिए विशेषरूप से संगठित उत्पादन की व्यवस्था न की जाय और जब तक कि माता-पिता के लिए, विशेष रूप से माताओं की आवश्यकता के अनुरूप काम-काज सम्बन्धी परिस्थितियों में अनुकूलता न उत्पन्न कर दी जाय और जब तक कि निवास-स्थानों नगरों एवं सामुदायिक सेवाओं का पुनर्गठन बच्चों के हित को विशेष रूप से ध्यान में रखते हुए न किया जाय।

प्रजाति एवं संस्कृति के पारस्परिक सम्बन्धों के विषय में यह निवेदन करने के उपरान्त मैं भारतीय संस्कृति की कहानी की चर्चा करना चाहूँगा। सन् १९११ में अहमदाबाद के संस्कृत-आयोग के १९ वें अधिवेशन के अध्यक्षीय भाषण में डा० सुनीतिकुमार चाटुर्ज्या ने (संस्कृत आयोग के अध्यक्ष के रूप में जिनकी नियुक्ति का मैं हृदय से स्वागत करता हूँ) यह संकेत किया था कि भारतीय जनता रक्त भाषा और संस्कृति की दृष्टि से एक मिश्रित जनता है। आपने कहा था कि मनुष्य की मूलभूत एकता एक ऐसी प्रस्थापना है कि यदि उसे केवल मात्र पारिभाषिक रूप में स्वीकार न करके समुचित अनुभव द्वारा उपलब्ध किया जाय तो इससे हमें यह सोचने में सुविधा होगी कि मानवीय सम्बन्धों में अन्तःप्रजातीय प्रजनन अत्यन्त स्वाभाविक निष्कृति है।

भारतवर्ष में इस मानवीय एकता को सर्वव्यापी परम तत्त्व के अंश रूप में स्वीकार किया गया है सर्वोच्च अथवा सर्वात्मक। उनका मत है कि प्रजातीय अथवा सांस्कृतिक समूह के रूप में मानव जाति के विभाजन की पृष्ठभूमि में अधिकार एवं वैभव विलास की लिप्सा विद्यमान है जो कि प्राविक राजनैतिक धार्मिक एवं सांस्कृतिक विस्तार के लिए किये गए समस्त संगठित आंदोलनों में अन्तर्भूत और प्रबल है। जिस प्रकार किसी एक व्यक्ति के लिए अपने को सबसे अलग रखकर काम चला सकना सम्भव नहीं उसी प्रकार कोई भी प्रजाति जनसमूह अथवा राष्ट्र आधारभूत रूप से एक दूसरे से सर्वथा पृथक नहीं रह सकते या अपने आप में सीमित नहीं रह सकते।

भारतीय सभ्यता का आधारभूत तत्त्व यही है कि उसमें विरोधी तत्त्वों का सामंजस्य हुआ है। इस संश्लेषण द्वारा अनेकता में एकता का निष्पादन हुआ है जो कि स्वयं जीवन के समान ही व्यापक सुविस्तृत और सर्वव्यापी है। भारतीय संश्लेषण जैविक संस्कृतियों धार्मिक तथा सामाजिक मतों एवं रीति-रिवाजों के साथ-साथ सिद्धान्तों तथा विचारों का अद्भुत सम्मिश्रण होने के अतिरिक्त एक उच्च बौद्धिक एवं आध्यात्मिक धरातल पर आधारित है जिसकी अभिव्यंजना निम्नलिखित तत्त्वों में होती है —

महद् तत्व की अभिव्यक्ति के रूप में समस्त जीवन की एकता का भाव जो कि अन्तर्भूत भी है और अतीन्द्रिय भी; संश्लेषण की आकांक्षा जीवन के

विच्छिन्न एवं विषम तत्त्वों तथा अनुभूतियों को समुचित रूप में समायोजन और एकरूपता प्रदान करते हुए; बुद्धि तत्त्व का समुचित अनुमान करते हुए, उच्च स्तर पर उत्तम अन्तःप्रेरणा सम्यक् दर्शन, जीवन के सुख और दुःख के साथ उसे एकमय बनाना और उनके मूल कारणों का अनुसन्धान करके उन्हें दूर करने का प्रयास; जो कुछ भी जीवनमय है उसकी पवित्रता की भावना और इससे भी ऊपर दूसरे विश्वासों और दृष्टिकोणों के प्रति सहिष्णुता। इस अन्तिम सत्य की उपलब्धि ही जीवन का परम ध्येय है। और इस ध्येय की उपलब्धि के मार्ग भी अनेक हैं और साधक को अपनी व्यक्तिगत शिक्षा, प्रकृति और मानसिक रुचि के अनुसार अपना मार्ग चुनना होता है—फिर भले ही वह *ज्ञान मार्ग चुने या प्रेम, आत्म संयम सत्कर्म और सौमनस्य का मार्ग चुने।* क्योंकि वह परम सत्ता साधक के ज्ञान-सामर्थ्य के अनुरूप अपने को अनेक रूपों में प्रकट करती है। भौतिक जगत् की उसकी धारणा काल और स्थान की सीमा का अतिक्रमण कर जाती है। पदार्थ और शक्ति एक ही पार्थिव वस्तु के विभिन्न रूप हैं जो कि उस अदृष्ट सत्ता के बाह्य अभिव्यक्त स्वरूप हैं। और इस संश्लेषण की भावना इसलिए पैदा हो सकी है और सरलतापूर्वक उसका विकास हो सका है, क्योंकि अत्यन्त प्राचीन युग से भारतीय मंच पर विभिन्न लोग *विभिन्न भाषाएँ, संस्कृतियाँ जीने के ढंग और विचारों के साथ अवतरित होते* रहे हैं।

भारत ने बाहर से एक के बाद दूसरी लहर के समान उमड़ कर आने *वाले आगन्तुकों का स्वागत किया। ये सामान्यता छह प्रजातियों की थी* धाराओं में विभाजित थे और चार भाषा परिवारों की भाषाएँ बोलते थे जो कि अब भी प्रचलित हैं। जो लुप्त हो चुकी हैं वे इनके अतिरिक्त थी। अफ्रीका महाद्वीप से नीग्रोमाइड्स जिनके चिह्न भारतीय सभ्यता पर और भारतीय जनता में (दक्षिण भारत की कुछ आदिम जातियाँ जो तमिल भाषा भी बोलियाँ बोलती हैं) प्रायः नगण्य हैं और फिलिस्तीन से प्रो-आस्ट्रोलायड आए, जिनमें से कुछ तो भारत से बाहर आस्ट्रेलिया तक भी बस गए मध्यभारत के मुण्ड और *प्रथम से काली नामकरेर बोली-बोलने वाले जो मौन भारतवर्ष में रह गये* वे आस्ट्रिको संथालो मुण्डा कोरकू शबरा और सवारा में मिल गये। उन्होंने भौतिक एवं आध्यात्मिक क्षेत्र में भारतीय सभ्यता में कुछ आधारभूत योगदान किया जैसे कि फावड़े या डंडे से चावल की खेती कुछ फलों और सब्जियों की खेती मुर्गी-पालन धर्म-संस्कार तथा कपास की खेती इत्यादि। मरणोत्तर जीवन के विषय में भी उन्होंने कुछ विचार दिये जिन को आगे चल कर दूसरे तत्त्वों की सहायता से पुनर्जन्म एवं संसार के उच्च सिद्धान्तों में परिणति हुई।

इसके बाद पूर्व से मंगोल आए जिनके अवशेष कुछ अंशों में उत्तर और उत्तर-पूर्व में पाए जाते हैं और वे भारतीय सभ्यता के एक महत्त्वपूर्ण अंग बन चुके हैं। तदनन्तर पूर्व भूमध्यप्रदेश या एशिया संघ से सम्भवतः ईसा से १५०० वर्ष पूर्व द्राविड़ों का आगमन हुआ जिन की सभ्यता आस्ट्रिकों की ग्रामीण संस्कृति से जो कि अपने आपमें एक महान् सांस्कृतिक अवदान के रूप में आई अधिक उन्नत थी। पंजाब सिन्ध और राजस्थान के प्राक्-आर्यों की— जिन्होंने हड़प्पा और मोहनजोदड़ो की महान् संस्कृतियों को जन्म दिया—भाषा, धर्म एवं सामाजिक तथा राजनीतिक संगठनों के अध्ययन से हम इस परिणाम पर पहुँचते हैं कि वे द्राविड़ों से प्रभावित थे। उनकी अपनी एक लिपि भी थी जो अभी तक विशेषज्ञों को स्पष्ट रूप से ज्ञात नहीं हो सकी है।

डा० चाटुर्ज्या के अनुसार भारत की मूलभूत संस्कृति अधिक अंशों में निश्चित ही द्राविड़ है यद्यपि इसकी अभिव्यक्ति मुख्यतः आर्य भाषाओं के माध्यम से हुई है। अन्त में इण्डो-यूरोपियन भाषा-भाषियों की महान् इण्डो ईरानियन शाखा के इण्डो आर्यन सम्प्रदाय का आगमन हुआ और वह आगमन ईसा से २००० वर्ष मध्य-पूर्व एवं निकट-पूर्व तथा यूरोप की सभ्यता में एक प्रबल शक्ति एवं उत्ताप सिद्ध हुआ। इसके पश्चात् वैदिक युग में आस्ट्रिक मंगोल द्राविड़ और आर्य इन चारों के सम्मिलन से भारतीय मानव का निर्माण हुआ।

प्रजातीय दृष्टि से देखा जाय तो भाषीय परिपालन एवं तदनुवर्ती अन्तर्मिश्रण से जिस सामान्य भारतीय रूप का विकास हुआ वह विशेषतया मैदानी भागों में सम्पन्न हुआ। बड़े पैमाने पर विवाहों द्वारा रक्त संकर तभी सम्भव होता है जब कि विभिन्न समूहों के लोग सामान्य भाषा का प्रयोग करें एवं उसके माध्यम से अभिव्यक्त किए जाने वाले एक ही सांस्कृतिक रूप को अंगीकार करें। प्रजातीय अन्तर्मिश्रण के कारण त्वचा का वर्ण निरर्थक होने के परिणाम-स्वरूप जाति के कर्मणा वर्ण" के एक नये सिद्धान्त का आविर्भाव हुआ जिस ने वैदिक आर्यों के मौलिक प्रजातीय विचार को तिरोहित कर दिया और किसी स्वीकृत व्यवसाय उद्योग या व्यापार-श्रेणी के आधार पर ही जातियों का निर्माण होने लगा। प्रजातीय पक्ष की अपेक्षा आर्थिक पक्ष को अधिक महत्त्व दिया जाने लगा और धार्मिक पक्ष की अपेक्षा सामाजिक पक्ष बलवत्तर हो उठा। भारतीय जनता की जाति के प्रति सहिष्णुता अथवा उसका समर्थन सामान्यतया आर्थिक अवस्था की स्थिरता पर आधारित है न कि उस के प्रजातीय उपलक्षणों पर।

आन्तरिक अथवा बाह्य रूप में सम्पन्न होने वाले मजातीय एवं सांस्कृतिक सम्मिलन के मूल में स्थान द्वारा विकसित संश्लेषण की उदार भावना ने ही भारतीय सभ्यता के मूलभूत स्वरूप का विकास किया है और उसे स्वर प्रदान किया है।

भाषा सम्बन्ध में १००० वर्षों से प्राय भाषा अपनी शैली या स्वरों में शब्दरचना सम्बन्धी प्रवृत्ति में शब्दकोष में एवं सर्वोपरि अपनी वाक्यरचना में या शब्दों के क्रम में बराबर द्राविड़ भाषा के निकटतर आती रही है।

आर्य एवं अनार्य संस्कृतियों के सम्मिलन में भौतिक संस्कृति का निर्धारण भौगोलिक परिस्थिति प्रभावित आर्थिक तत्वों द्वारा हुआ है। आर्यों के भोजन में मुख्यत जौ मांस दूध एवं तन्निर्मित पदार्थों तथा शहद का समावेश होता था। गेहूँ उन्होंने मैसोपोटामिया में पाया और चावल ईरान भारत, हैण्ड्सि मंगोलिया के पूर्वी भू खण्डों तथा पूर्व में उनको मिला। आदि आर्यों की नियमत एवं प्रचुर परिमाण में मांस खाने की आदत पर जिस का वर्णन हमें महाभारत में मिलता है, सन' सनै' बंधन लगाये जाने लगे या उस का परित्याग किया जाने लगा और अहिंसा के प्रचार (ईस्वी सन् १००) के कारण भारत में प्राचुर्य से पायी जाने वाली सब्जियों तथा दूध का अधिक प्रयोग होने लगा। कौटिल्य के समय (चतुर्थ शताब्दी ईसा पूर्व) में चावल दाल घी या तेल और नमक भक्ष्य भरती के आर्यों के भोजन में सम्मिलित थे। बौद्धों एवं जैनों से प्रभावित होकर लोगों ने शिरोमुण्डन कराना प्रारम्भ कर दिया। गृह-निर्माण में काष्ठ के स्थान पर ईंट और पत्थर या बाँस या सरपत का प्रयोग प्रारम्भ हुआ।

आर्यों ने अपने खान-पान पोशाक पर और उसके साज-सामान में स्थानीय प्राक्-आर्य भारतीय रीतियों को अपनाया। हमारी सामाजिक प्रथाओं रहने के ढंगों और वैयक्तिक प्रवृत्तियों के अनेक पहलुओं का अध्ययन करने से उन पर प्राक आर्य प्रभाव की विजय स्पष्ट लक्षित होती है।

भारतीय धर्म की दो धाराओं—दर्शन और कर्मकाण्ड—निगम और आगम में से अपने उद्भव में दूसरी अनार्य प्रथा सम्भवत द्राविड़ है। होम की वैदिक क्रिया-पद्धति ने अनार्यों की पूजा की पुष्पोपहार पद्धति को अंगीकार किया। योगाभ्यास सदृश हिन्दू धार्मिक संस्कृति के महत् तत्वों की खोज प्राक्-आर्य युग में की जा सकती है। आर्यों के ही नहीं अपितु द्राविड़ों तथा आस्ट्रिकों के विचारक वन में प्रचलित जीवन के गम्भीर तत्वों एवं मरणोत्तर जीवन की प्रतीति द्वारा आत्माओं के शरीरान्तर प्रवेश तथा संसार के विचार में

अन्तर्निहित नैतिक नियमों में विश्वास का प्रादुर्भाव भारत-भूमि पर उत्तर वैदिक युग में हुआ। १२०० से ५०० ई० पूर्व के महत्वपूर्ण समय में वैदिक युग के उत्तरार्द्ध एवं उपनिषदों के युग में हम एक समस्त भारतीय संश्लेषण को अपनी भावना से परिव्याप्त करने वाले पूर्ण दर्शन को मूर्तिमान् देखते हैं और यह वह युग था जब हम भारतीय मानव को अपनी विभिन्न जातियों और संस्कृतियों के महान् संश्लेषण के साथ मानवता के इतिहास में एक अत्यन्त अद्भुत घटना के रूप में सुस्थित हुआ पाते हैं।

भारतीय संस्कृति के निर्बाध एवं अविच्छिन्न प्रभाव को समस्त संसार ने स्वीकार किया है। ईस्वी पूर्व की दशमंशी तक यह संस्कृति पूर्णत विकसित समग्र रूप से वैयक्तिक, स्वतन्त्र एवं प्राविधिक रूप से भिन्न तथा बेबीलोन की अन्यापेक्ष सभ्यताओं की समानता करने वाली एक नागरिक संस्कृति थी। इसकी जड़ें भारत-भूमि में गहरी जा चुकी थीं और प्रतिवर्ष नवीन पुरातत्त्व के साक्ष्य से सिन्धु घाटी के दक्षिण-पूर्वी सीमान्तों तक इसका विस्तार दृष्टिगोचर होता है। अत्यन्त अनुदार सिद्धान्तों के अनुसार भी ऋग्वेद का काल होमर तथा ओल्ड टेस्टामेण्ट से प्राचीनतर सिद्ध होता है और उसके वेदान्त के स्रोत रूप अन्तिम भाग-उपनिषद् तो पाइथागोरस एवं प्लेटो से भी पूर्व के हैं। सार्वभौम परमतत्त्व एवं व्यक्तिरूप ईश्वर की कल्पना तथा ब्रह्म के अन्तिम सत्य एवं सान्त जीवन के सापेक्ष सत्य के भेद का स्पष्टीकरण उपनिषदों में है। सत्य के एकाधिकार के दावों को निरुत्साहित करने के साथ साथ उपनिषद् हमें आध्यात्मिक अनुभूति की अखण्ड एवं भव्य प्रतिच्छाया प्रदान करते हैं। जियो और जीने दो' के सिद्धान्त पर वे जिज्ञासुओं को अपने ही मार्गों से अभीष्ट चरम पर पहुँचने की पूर्ण स्वतन्त्रता प्रदान करते हैं।

ईस्वी पूर्व की छठी शताब्दी का महावीर और बुद्ध का युग एक महान् जागरण का युग था। उनके सिद्धान्तों ने अहिंसा के तत्त्वों को एक नूतन पवित्रता प्रदान की और एक नयी दृढ़ता के साथ भगवान् बुद्ध ने उपनिषदों के सत्य की पुनःस्थापना की। तीन शताब्दी बाद अशोक ने धार्मिक एवं सांस्कृतिक साधनों द्वारा बौद्ध धर्म को सीरिया तथा फिलिस्तीन समेत दक्षिण पूर्वी एशिया में चीन जापान और इण्डोनेशिया तक फैलाया। सर्वत्र ही सुदूर भारत हिन्द-चीन और इण्डोनेशिया—में ब्राह्मण एवं बौद्ध विचार-प्रणालियों का विस्तार हुआ तथा भारत के समान ही इन देशों में भी दोनों का समन्वय हुआ।

ईस्वी सन् १०० के लगभग सुदूर भारत में भारतीयों की समुद्री एवं व्यापारिक गतिविधियों में एक अभूतपूर्व अभिवृद्धि के दर्शन होते हैं और भारतीय प्रभाव-क्षेत्र विलक्षण रूप में विस्तृत होता हुआ दिखायी देता है। कम्बोडिया में पाया जाने वाला संस्कृत का सर्वप्रथम शिलालेख ईस्वी सन् तीसरी शताब्दी का है और इण्डोनेशिया में ५वीं शताब्दी का। इस समय मलाया में कुछ छोटे-छोटे हिन्दू राज्यों का भी पता चलता है। इस युग में नौ विद्या के सुधार एवं समुद्र पार की यात्रा और विदेशियों के साथ पारस्परिक व्यवहार में किसी प्रकार की छुआछूत का भय न मानने वाले बौद्धमतावलम्बियों (द्राविड़ अच्छे नाविक थे) ने इस बृहत् यात्रा में बड़ी सहायता पहुँचायी। यह उपनिवेश-स्थापना पूर्ण शान्तिमय उपायों से सम्पन्न हुई और स्वयं भारत ने अपने उपनिवेशों में राजनीतिक प्रभाव का प्रयोग नहीं किया। संसार के इस भाग में ईस्वी सन् १२०० तक भारतीय प्रभाव एवं संस्कृति का बोलबाला रहा जबकि स्थानीय तत्त्वों ने अपना प्रभाव डालना प्रारम्भ किया और हिन्दू बौद्धिकता का उत्कर्ष ह्रासोन्मुख हुआ। कला एवं बौद्धिक निर्माण के क्षेत्र में हिन्दू यहाँ हमें यथार्थतः एक सृजनात्मिका शक्ति के रूप में दिखायी देता है।

१३वीं या १४वीं शताब्दी में व्यापारी वर्ग ने इस्लाम को गुजरात से जावा में पहुँचाया।

आठवीं शताब्दी के लगभग या तदुपरान्त दक्षिण भारत के महान् शिक्षकों शंकर रामानुज तथा माध्व ने उत्तर और दक्षिण में सांस्कृतिक एकता को दृढ़ किया।

भारत में इस्लाम के फैलने के साथ-साथ रामानन्द कबीर, रामदास दादू तुकाराम तुलसीदास नानक और चैतन्य के धर्म-सिद्धान्तों में आस्तिकता का विकास अपने चरम रूप में प्रकट हुआ। केवल आध्यात्मिक नेताओं ने ही नहीं अपितु अकबर महान् ने भी दोनों धर्मों के समन्वय का प्रयत्न किया। इस्लाम के सूफ़ीवाद में वेदान्त दर्शन के साथ निकटतर सम्बन्ध दिखायी देता है। हिन्दुओं के व्यापक दृष्टिकोण तथा सहिष्णुता की भावना ने मुग़लों को प्रभावित किया और १४वीं तथा १६वीं शताब्दियों के मध्य की सांस्कृतिक गतिविधियाँ हिन्दू-मुस्लिम सहकारिता का ज्वलन्त प्रमाण हैं। विज्ञान और साहित्य में संगीत और वास्तुकला चित्रालेखन और नृत्यकला में हिन्दू एवं मुस्लिम विचारों में एक अद्भुत सम्मिश्रण दृष्टिगोचर होता है।

ईसाई युग के प्रारम्भ से दक्षिण में ईसाई मत का प्रचार अपने पूर्ण

जीवन पर था और प्रारम्भ के ईसाई अपने को सामान्य हिन्दू जाति का ही एक आन्तरिक तथा अभिन्न अङ्ग समझते थे। वे भारतीय संस्कृति के उत्तराधिकारी हैं, और भारत की निजी आध्यात्मिक परम्परा के साथ अंगीकृत ईसाई सिद्धांतों का सामंजस्य स्थापित करने के लिए अग्रगण्य भारतीय ईसाई नेताओं के प्रयत्न इस दिशा में जारी हैं।

दूसरे धर्मों के स्वरूप का सादर समालोचन भारतीय धार्मिक जीवन की एक विशेषता रही है। 'सहिष्णुता ही वह धर्म है जिसे हमारी सीमित बुद्धि उस असीम के चरणों में अर्पित करती है। *(विश्वविद्यालय शिक्षा आयोग का प्रतिवेदन)।*

आध्यात्मिक अन्तर्दर्शन में आत्म-अन्वेषण एवं आत्म-सिद्धि द्वारा ही हमारे उत्कृष्ट विचारानुसार मानव उस सार्वभौमिक परम तत्त्व की झाँकी पाता है जिसके समस्त व्यक्ति जातियाँ एवं राष्ट्र विशिष्ट और प्रकट रूप हैं। संस्कृति की महत्ता उसके स्थायित्व में जो कि एक सापेक्ष पद है निहित नहीं है अपितु वह तो उन गुणों के योगदान में निहित है जो मनुष्य के आन्तरिक मूल्यों एवं बाह्य परिस्थितियों के मध्य शाश्वत संघर्ष के रूप में घटित होने वाले इतिहास के रहस्यमय अभिनय की दिशा को परिवर्तित करते रहते हैं। इसके भविष्यशाली स्वरूप की परीक्षा इस योग्यता पर अवलम्बित है कि वह अपनी महत् योजना का आत्म-समर्पण किये बिना विकास के पथ पर अग्रसर हो सकती है और अपनी केन्द्रीय रचना के साथ न तो पूर्वोक्त सामंजस्यमय और न संघर्षमय तत्त्व को आत्मसात् कर सकती है।

श्री अरविन्द ने आज बहुत वर्ष पहले जो लिखा था वह आज भी सत्य है (भारतीय संस्कृति के आधार)।

यूरोपीय आक्रमण से पहले के अपने स्वरूप को ठीक *उसी प्रकार* अक्षुण्ण बनाए रखने का प्रयत्न करना या भविष्य में आधुनिक *परिस्थितियों* तथा आवश्यकताओं के दावों की उपेक्षा करना स्पष्ट असफलता को *पूर्ण* आमन्त्रण देना है। परन्तु एशियाई का भारतीय मस्तिष्क इन *समस्याओं* का सामना करके और उनका अपने आदर्शों एवं भावना की *पूर्ति करने वाला* समाधान प्रस्तुत करके ही सफलतापूर्वक प्रभावी सिद्ध हो *सकता है। संस्कृति* का विकास अवश्यम्भावी है अन्यथा वह लुप्त हो जायगी *किन्तु परिवर्तन* मन्दगतिक ही होता है। सर्वाधिक सफल समाज वह है जिसकी *संस्कृति सर्वोत्कृष्ट* नागरिकों का आह्वान करती है और उनकी सर्वोत्कृष्ट *भावनाओं के अनुरूप* सिद्ध होती है।

अपने ही दृष्टिकोण एवं शक्ति के अनुरूप इस पर प्रत्येक समझदार भारतीय को विचार विमर्श करना चाहिए। हमारे विविध समाजों और विश्वविद्यालयों का यह मुख्य प्रयोजन होना चाहिए।

किसी राष्ट्र की सभ्यता एवं संस्कृति जैसे सूक्ष्म विषयों पर विचार करते हुए इन शब्दों के प्रयोग में यथासम्भव विवेक वांछनीय है। दुर्भाग्य से कुछ वैज्ञानिक और दार्शनिक विद्वान इन दोनों शब्दों को एकार्थक समझते हैं। संस्कृति की परिभाषा करते हुए एक विदुषी ने यह मत प्रस्तुत किया है कि संस्कृति मानव के लिए इस मानव की भौतिक सृष्टि एवं उसके अदृश्य मानसिक संसार की सृष्टि का समाहार है जिस तक उसकी पहुँच विचार शक्ति द्वारा ही सम्भव है। इस विदुषी के मतानुसार संस्कृति परम्परा से प्राप्त होती है और समय तथा स्थान उसे स्थिर रूप प्रदान करते हैं। यह मानव समाज का एक गुण है परन्तु इसका निवास व्यक्तियों में है और उन द्वारा ही यह प्रकट रूप में हमारे सामने आती है इसका उत्थान और पतन होता परन्तु किसी एक व्यक्ति के माध्यम से इसकी पूर्ण अभिव्यक्ति कदापि सम्भव नहीं। इसका व्यक्ति-स्वतन्त्र अस्तित्व है। परन्तु प्रत्येक व्यक्ति अपनी *परम्परागत संस्कृति को धारण किये होता है संस्कृति के एक दृढ़ एव अदृश्य* सूत्र में बँधा होता है। सभ्यता और संस्कृति साधारणतः जनता को संचित उत्तरा धिकार के रूप में मिलती है। परन्तु पर्यावरण द्वारा उनका निर्धारण होता है और वे पर्यावरण का निर्धारण करते हैं। पर्यावरण ही उनको स्वर एवं बल प्रदान करता है।

जब कि सभ्यता सामाजिक स्तर पर सामाजिक उत्तराधिकारों का पूर्ण योग है वयक्तिक स्तर पर उन्हीं उत्तराधिकारों को संस्कृति के नाम से अभिहित किया जाता है। एक प्रसिद्ध भारतीय मूर्त्तशास्त्री का कहना है जो कुछ हमारी थाती है वह हमारी सभ्यता है और जो कुछ हम स्वयं है, वह हमारी संस्कृति है। सभ्यता का समाविष्ट और कार्यकारी रूप ही संस्कृति है।

सामान्यतः संस्कृति विशेषतः भारतीय संस्कृति के विकास की प्रक्रिया के स्पष्टीकरण एवं इसके मौलिक स्वरूप की व्याख्या के उपरान्त अब उचित यह होगा कि हम सांस्कृतिक पृष्ठभूमि में सम्मेलन के ध्येयों एवं प्रयोजनों इसके पूर्वकालीन कृत्यों, वर्तमान कार्यों के संबंध दिशा-निर्धारण एवं भावी कार्य की रूपरेखा की परीक्षा करें। सम्मेलन मैं सन् १६४८ में प्रयाग में होने वाले प्रथम अधिवेशन में घोषित किया था —

१—भारतीय सनातन आर्य धर्म का महत्व और

२—भारतीय संस्कृति की एकता।

तथा बनारस के द्वितीय अधिवेशन ने निम्नलिखित विषयों का समाहित करने वाला प्रस्ताव स्वीकार किया था—

१—गो-वध निषेध।

२—देश का इण्डिया के स्थान पर भारत नामकरण करना।

३—हिन्दू कोड बिल का विरोध।

४—संस्कृत जानने वाले लोगों की राजदूतों के पद पर नियुक्तियाँ।

५—विदेशों में भेजे जाने वाले शिष्ट-मण्डलों में भारतीय संस्कृति के व्याख्याताओं को सम्मिलित करना।

६—भारतीय संस्कृति के आधार पर भारतीय नीति का निर्धारण।

७—हिन्दी को भारतीय संघ की प्रतिष्ठित भाषा के रूप में चुनना और देवनागरी-लिपि को संविधान की लिपि स्वीकार करना।

८—विद्यालयों, महाविद्यालयों और विश्वविद्यालयों में संस्कृत का अध्ययन आवश्यक विषय के रूप में प्रारम्भ करना।

इससे पूर्व मिर्जापुर में एक विशेष अधिवेशन भी बुलाया जा चुका है जिसके अन्दर सिनेमा-फिल्मों में सांस्कृतिक दृष्टिकोण से सुधार करने की ओर ध्यान आकर्षित किया गया था।

सन् १९५० में हरिद्वार में हुए तीसरे अधिवेशन के अन्तर्गत भारतीय संस्कृति के प्रति भारत सरकार की कथित उदासीनता की भर्त्सना की गई थी।

सन् १९५२ में दिल्ली में हुए चतुर्थ अधिवेशन के अन्तर्गत स्वीकृत प्रस्ताव में जिन नई चीजों की ओर ध्यान दिया गया वे इस प्रकार हैं—

१—भारतीय संस्कृति की परम्परा को सुरक्षित रखने की आवश्यकता।

२—जनता की संस्कृति और प्रतिभा के अनुकूल विशिष्ट भारतीय आधार पर शिक्षा-पद्धति का पुनर्गठन करना।

सन् १९५३ में ऋषिकेश में सम्पन्न होने वाले अधिवेशन में जिन नवीन पहलुओं को प्रस्ताव में सम्मिलित किया गया उनमें निम्नलिखित चीजों की ओर ध्यान आकर्षित किया गया—

१—समाज के सुधार की ओर साधु-समाज द्वारा ध्यान दिया जाना।

२—साम्प्रदायिक विद्वेष दुर्भावना और असहनशीलता को दूर करके पारस्परिक सम्मान और एकता की भावना पैदा करना।

३—मंदिरों का प्रकाश और सौंदर्य के स्मूलों के रूप में पुनर्निर्माण करना ।

४—शारीरिक एवं मानसिक रूप से पीड़ितों की सेवा ।

५—समाज के प्रत्येक वर्ग और विभाग द्वारा सत्य की सतत साधना ।

६—जनता के नैतिक जीवन का उन्नयन ।

७—मादक द्रव्यों और पेयों का तम्बाकू सहित निषेध ।

सन् १९५४ में प्रयाग में हुए छठे अधिवेशन में निम्नलिखित चीजों की ओर ध्यान दिया गया —

१—विदेशी मिशनरियों द्वारा धर्म-परिवर्तन के कथित आपत्तिजनक उपायों की ओर ।

२—वेश्यावृत्ति का अभिशाप ।

३—हिन्दू-मन्दिरों से अश्लील आकृतियों के हटा दिए जाने की आवश्यकता ।

४—भ्रष्टाचार और बेईमानी—विशेषतः व्यापार और उद्योग क्षेत्र में ।

इस अधिवेशन के पूर्व सन् १९५३ में भिवानी (हिसार) में होने वाले अधिवेशन में निम्नलिखित प्रस्ताव स्वीकार किए गये थे —

१—विदेशी विचारों के आक्रमण तथा हानिकारक प्रभावों से भारतीय संस्कृति की रक्षा करना ।

२—नागा साधुओं द्वारा नग्नरूप में जनता में विचरण करने की प्रथा का परित्याग ।

३—बुद्ध जयन्ती समारोह में जनता द्वारा हार्दिक सहयोग ।

इस मंच पर उपस्थित होने वाले सभाध्यक्ष के रूप में यदि मैं निर्णय देने का साहस करूं तो मैं यह कह सकता हूँ कि यह सम्मेलन संस्कृति के मूल तत्त्वों उसके प्रचार और व्यावहारिक रूप से भली भाँति अवगत है और अपने प्रस्तावों में उसने जिन कार्यों का सुझाव दिया है वे किसी भी सुसंस्कृत समाज के हितों का सक्षिप्त एवं महत्त्वपूर्ण ढंग से सम्पादन कर सकते हैं। इस दिशा में मैं केवल एक ही सामान्य आलोचना करने का साहस करूंगा (क्योंकि यह सम्भव है कि अलग-अलग विषयों पर प्रकट किए गए हुए विचार से मैं सहमत न होऊँ) कि कार्य-क्षेत्र को इतना अधिक विस्तृत बना दिया गया है कि प्रभावकारी ढंग पर प्रचार और कार्य होना सम्भव नहीं दीख पड़ता ।

ये २० विषय—जिनकी घोषणा की गई है अथवा जिन्हें प्रस्तावों द्वारा स्वीकार किया गया है—ऐसे हैं जिन से कोई असहमत नहीं हो सकता उदाहरणार्थ भारतीय संस्कृति की प्राचीनता एकता और भारतीय संस्कृति

के गुण सम्बन्धी प्रस्ताव । इनमें से कुछ विषयों का अब महत्त्व नहीं रह गया है क्योंकि हमारे विधान-निर्माताओं ने उनके बारे में निर्णय कर लिए हैं उदाहरणतः इस देश का नाम भारत स्वीकार कर लिया गया है और हिन्दी को राजकीय भाषा और उसको व्यवहृत करने सम्बन्धी विधि को भी स्वीकार किया जा चुका है ।

कुछ विषयों का निर्णय संसद् ने किया है, उदाहरणतः हिन्दू कोड बिल। और यहाँ मैं इस चीज का उल्लेख इसलिए कर रहा हूँ ताकि मैं यह प्रकट कर सकूं कि सम्मेलन के कुछ विचारों से मैं असहमत हूँ। मैं यह मानता हूँ कि स्त्रियों को पुरुषों के समान अधिकार प्राप्त होने चाहिए, क्योंकि मैं इसे किसी भी मानव-समाज की उच्चतम सांस्कृतिक स्थिति का लक्षण मानता हूँ। मेरी सम्मति में राजदूतों की योग्यताओं का निर्णय करने जैसा विषय राज्य के विवेक पर छोड़ देना चाहिए क्योंकि राष्ट्र के हितों का निर्णय एवं प्रतिनिधित्व केवल संस्कृत के पाण्डित्य के आधार पर ही नहीं किया जा सकता। संस्कृत के अध्यापन के सम्बन्ध में हाल ही में राज्य ने संस्कृत आयोग की नियुक्ति की है और सम्मेलन के लिए यह वांछनीय होगा कि वह आयोग के समक्ष अपने दृष्टिकोण को प्रस्तुत करने के लिए एक समिति नियुक्त करे। संस्कृत भाषा के प्रति मेरी रुचि एवं भक्ति है तथापि मेरी यह दृढ़ धारणा है कि विद्यालय महाविद्यालय और विश्वविद्यालय के पाठ्यक्रमों में संस्कृत भाषा एवं साहित्य के अध्ययन को अनिवार्य विषय बनाने में हमारे सामने बड़ी कठिनाइयाँ प्रस्तुत होंगी किन्तु मेरी सम्मति में उनका हमारी संस्कृति तथा आधुनिक भाषाओं पर क्या प्रभाव है इसका ज्ञान हमारे अध्येताओं को होना आवश्यक है ।

चलचित्रों एवं उनके समाज में उपयुक्त स्थान के विषय में मेरा ऐसा विश्वास है कि फ़िल्म बोर्ड और इन्स्टीट्यूट की स्थापना होने से इस महत्त्वपूर्ण दिशा में भी समुचित कार्यवाही की जा सकेगी ।

दूसरी गम्भीर समस्या मद्य-निषेध की है जिसकी ओर जनता का ध्यान आकृष्ट किया गया है, यद्यपि मेरा यह विश्वास है कि इस दिशा में सुधार होगा तो सही परन्तु धीमे धीमे और अनेक कठिनाइयों का सामना करते हुए ।

अवशिष्ट विषयों में से कुछ तो मौलिक है दूसरे उतने नहीं हैं। दूसरी श्रेणी में नाना प्रथाओं मन्दिरों की भित्तियों पर अश्लील चित्रांकन एवं साम्प्रदायिक विषयों के प्रति सामान्य रूप से साधुओं का क्या दृष्टिकोण है—ये चीजें सम्मिलित हैं। साधुओं का अब एक समाज के रूप में संगठन किया जा

चुका है और अब सम्मेलन द्वारा एक ऐसी समिति की नियुक्ति कर देना ही पर्याप्त होगा जो कि साधु-समाज के साथ सम्पर्क संस्था के रूप में कार्य करती रहे। सम्मेलन द्वारा वांछित आदर्शों के अनुसार गाँवों की पुनर्रचना का कार्य एक समिति को सौंप देना चाहिए, जो कि राज्य के सामुदायिक विकास संगठनों के साथ सम्पर्क स्थापित कर सके।

केन्द्रीय समाज कल्याण बोर्ड ने एक सामाजिक एवं नैतिक स्वास्थ्य समिति की नियुक्ति की थी जिसके परामर्श पर केन्द्रीय सरकार ने अपनी द्वितीय पंचवर्षीय आयोजना में वेश्यावृत्ति के निवारणार्थ एक विशेष कार्यक्रम तथा उसके क्रियान्वय के लिए एक सुनिश्चित धन राशि की व्यवस्था की है। सम्मेलन एक ऐसी समिति नियुक्त कर सकता है जो इस विषय के अध्ययन के साथ-साथ केन्द्रीय समाज कल्याण बोर्ड के सम्पर्क में कार्य करे।

विदेशी मिशनरियों द्वारा तथाकथित अनुचित धर्म-परिवर्तन का कार्य सार्वजनिक महत्व का विषय बन गया है और अभी हाल ही में इस राज्य में एक जाँच-समिति की रिपोर्ट ने जनता का ध्यान इस ओर आकृष्ट किया है। मैं यह नहीं समझता कि सम्मेलन द्वारा इस विषय का और अधिक अनुसरण किए जाने की आवश्यकता है। मेरी दृष्टि में अनुचित धर्म-परिवर्तन के सब रूप मूलतः हिंसा के ही सूचक हैं। जहाँ तक शिक्षा प्रणाली के पुनर्संगठन का प्रश्न है यह विषय इतना विशाल है कि इस सम्बन्ध में केवल कुछ प्रस्ताव पास करने मात्र से काम न चलेगा। इस दिशा में सम्मेलन के प्रयास तभी सार्थक सिद्ध हो सकते हैं जब कि विभिन्न आयोगों तथा पुनरीक्षण समितियों के प्रतिवेदनों का पूर्ण अध्ययन करने के उपरान्त कुछ सुसंगत प्रस्ताव प्रस्तुत किये जायें।

राष्ट्र की वर्तमान दशा के सर्वेक्षण से सम्मेलन के इस विचार की पुष्टि होती है कि क्रियात्मक रूप में भारतीय संस्कृति का जनता पर प्रभाव न तो व्यापक है और न ही गहन जिसके परिणामस्वरूप राष्ट्र की भौतिक नैतिक एवं आध्यात्मिक उन्नति और इसके साथ जनता के कल्याण सुख एवं शान्ति की धारा अवरुद्ध हो रही है। यह इसलिए नहीं घटित हो रहा कि हम सांस्कृतिक मूल्यों के महत्व का अनुभव नहीं करते अपितु इसलिए कि जीवन के समस्त क्षेत्रों में जनता के स्वाभाविक नेताओं द्वारा इन मूल्यों को वास्तविक महत्व ही प्रदान किया जाता है। मेरा संकेत विभिन्न स्तरों पर राजनीतिक नेतृत्व की ओर ही केवल नहीं है अपितु शैक्षणिक संस्थाओं, विशेषतः विश्वविद्यालयों वाणिज्य एवं उद्योग विभिन्न व्यवसायों साहित्य और कला दर्शन और धर्म के क्षेत्रों में नेतृत्व की ओर भी है। सारांशतः हमारे युग का

संकट एक योग्य नेतृत्व के अभाव का संकट है और मेरी दृष्टि में निस्सन्देह यह एक ऐसा संकट है जिसने हमारे सांस्कृतिक मूल्यों को खतरे में डाल दिया है। इसी संकट की ओर सम्मेलन जैसी संस्थाओं को अपना विशेष ध्यान नैरन्तरिक रूप से केन्द्रित करना होगा।

हमारे सांस्कृतिक मूल्य क्या हैं और भारतीय जनता की उच्चतर आत्माभिव्यक्ति में वे किस प्रकार प्रतिबिम्बित होते हैं?

संस्कृति के निम्न गुण हैं —

१—बुद्धि प्रामाण्य की स्थापना।

२—सत्यं शिवं सुन्दरम् की साधना।

३—सहिष्णुता।

४—औत्सुक्य एवं साहसिक वृत्ति।

५—अहिंसा या शान्ति प्रेम।

इस सूची को और भी विस्तृत किया जा सकता है। परन्तु हमारे वर्तमान जीवन में जो कुछ शुभ एवं अशुभ है वह उपरिवर्णित पांच शीर्षकों के अन्तर्गत समाविष्ट होने वाले हमारे मूल्यों और धारणाओं की दृढ़ता या दुर्बलता के ही कारण है। उदाहरणत: पाखण्ड बौद्धिक तथा नैतिक ईमानदारी के अभाव से एवं आचरण सत्य के विरुद्ध व्याघात है। भ्रष्टाचार, लोभ स्वार्थ मोह एवं प्रतिलिप्सा शिव के विरोधी हैं। मालिन्य आलस्य अव्यवस्थितता एवं आडम्बर सौन्दर्य के प्रतिकूल हैं साम्प्रदायिक विद्वेष का कारण या तो सहिष्णुता का अभाव है या छद्मवेश में स्वार्थपरता। बौद्धिक औत्सुक्य एवं साहसिक वृत्ति के अभाव के परिणामस्वरूप ही संस्कृति के प्रति अज्ञान एवं उदासीनता उत्पन्न होती है। पीढ़ियों के प्रति उदासीनता तथा अनेकानेक पूर्वाग्रह अन्धविश्वास एवं बाधक प्रथाएँ बुद्धि के विरुद्ध आपाचरण हैं। निर्धनों या दुर्बलों का शोषण मूलत: हिंसा है।

इस वक्तव्य द्वारा मैं कोई वैज्ञानिक निदान प्रस्तुत कर रहा हूँ ऐसा मेरा आग्रह नहीं है। इसको उतना व्यापक बनाने का भी मेरा आशय नहीं था। मेरा उद्देश्य तो केवल संस्कृति के प्रभावहीन होने के कारण इतना ही है कि समाज के ढांचे में जो दुर्बलताएँ प्रविष्ट हो गई हैं उनकी ओर जनता का ध्यान आकर्षित हो जाए।

बहुत अधिक दार्शनिक वृत्ति धारण न करते हुए (दर्शन का कार्य तो अधिकतर परस्पर विरोधी मूल्यों की परख करके ऐसे मूल्यों की खोज करना है जो अधिकतम बुद्धि-संगत अतएव वांछनीय हों) मैं सिर्फ यही कहूँगा कि हमारे समाज में स्वार्थ और पाखण्ड प्रचुर परिमाण में पाये जाते हैं और

इसीलिए राष्ट्र के हितचिन्तकों के समक्ष वे एक बड़ी गम्भीर समस्या के रूप में समुपस्थित हैं।

स्वार्थ का यह भाव विशेष रूप से कुछ उच्च पदस्थ व्यक्तियों में समाज सेवा के क्षेत्र में भी पाया जाता है जिसका उपयोग वे दूसरों के वैध प्रभावों की बलि देकर अपने साम्राज्य निर्माण में करते हैं। इस स्वेच्छाचारिता का प्रदर्शन केवल योग्य व्यक्तियों द्वारा ही नहीं अपितु विवेकशिथिल व्यक्तियों द्वारा भी किया जाता है और इसीलिए इसकी जितनी भर्त्सना की जाय थोड़ी है।

इन विवेकशिथिल व्यक्तियों को संगठित होकर कार्यरत होने के पूर्व सर्वप्रथम अपनी शुद्धि करनी चाहिए। यदि वे ही स्वयं शुद्ध नहीं हैं तो दूसरों पर उनका प्रभाव कम ही पड़ेगा।

पाखण्ड एक दुहरा असत्य है क्योंकि यह असत्य होते हुए भी सत्य का स्वांग रचता है। हमारे वक्तव्य एवं आचार में इतने क्षेत्रों में महान् अन्तर है कि सत्य की विजय कठिन है और हमारा यह राष्ट्रीय ध्येय मात्र एक परिहास ही बन कर रह जाता है। सत्प्रवृत्तियों के लिए इसका एकमात्र उपाय जहाँ कहीं भी सम्भव हो पाखण्ड के आवरण को उखाड़ फेंकना है।

सामाजिक सेवा पुनर्निर्माण एवं राजनीतिक नेतृत्व के वास्तविक मूल्यों को विनष्ट करने वाली अनेक व्यापक रूप से फैली हुई बुराइयों में से स्वार्थ भी एक है। जनता को उनके नेताओं या कार्यकर्ताओं में स्वार्थ हेतु या अधिकार लिप्सा परखने में देर नहीं लगती और परिणामतः अथवा अविश्वास एवं असहयोग की भावना उत्पन्न होती है।

अत्यन्त खेद का विषय है कि जिस पवित्र भूमि पर परम्परागत रूप से सहिष्णुता एवं विनम्रता को उच्च स्थान दिया जाता रहा है, वहाँ उच्च पदों पर आसीन लोगों में असहिष्णुता एवं बौद्धिक मिथ्याभिमान पाया जाय। यह ठीक है कि चुनावों के अवसर पर हम साम्प्रदायिकता का विरोध करते हैं किन्तु नेतृत्व प्राप्त करने तथा सरकारी कारोबार में अभी भी साम्प्रदायिकता का बोलबाला है। अहिंसा एवं प्राणिमात्र के प्रति दया को मार्गदर्शक सिद्धान्तों के रूप में घोषित किया जाता है, फिर भी राजनीतिक दण्ड का भय हमारे उचित विचार एवं क्रिया को पंगु बना देता है और निर्वाचन-टिकट न देने का भय दिखाकर राजनीतिज्ञों को अपनी अन्तरात्मा की आवाज को दबाने के लिए विवश किया जाता है।

वाणिज्य एवं उद्योग क्षेत्र में भी दुर्बलों, अज्ञानियों एवं साधनहीन

व्यक्तियों का शोषण सहृदयता की भावना को तिलांजलि देते हुए बराबर किया जा रहा है। उनका कहना है व्यापार व्यापार है।

राजनीति राजनीति है और व्यापार व्यापार है जब तक इस सिद्धान्त को मान्यता दी जाती रहेगी तब तक हमारी संस्कृति एक मिथ्याभिमान सिद्ध होगी और वह हमारी अन्तरात्मा को चेतनाशून्य भले ही बना दे किन्तु वह समाज के अधःपतन एवं अन्ततोगत्वा उसके विनाश को रोकने में असमर्थ होगी।

अन्तिम विश्लेषण के रूप में मैं यही कह सकता हूँ कि इन तमाम समस्याओं का निदान जनता के हाथ में है और उसका धर्म है कि जो लोग हमारी संस्कृति में अभिपित्त नैतिक संहिता के प्रतिकूल आचरण के दोषी हैं उन्हें अस्वीकार करे और उनका समर्थन न करे। परन्तु इन त्रुटियों को जान सकने में हमें जनता की सहायता करनी होगी और यह कर्त्तव्य विश्वविद्यालयों के अन्दर तथा बाहर विचार-नेतृत्व करने वाले लोगों का है। सर्वप्रथम उन्हें आत्मशुद्धि करनी होगी। तदुपरान्त सांस्कृतिक आचार-संहिता के प्रतिकूल आचरण करने वालों के विरुद्ध निरन्तर संग्राम करना होगा और तब ही हमारी संस्कृति जीवित जाग्रत रह सकेगी तथा युग की आवश्यकताओं की परिपूर्ति कर सकेगी। इसके लिए साहस की आवश्यकता है किन्तु हमें भर्तृहरि का यह श्लोक स्मरण करना चाहिए —

एकेनापि हि शूरेण पादाक्रान्तम् महीतलम् ।
क्रियते भास्करेणैव स्फारस्फुरिततेजसा ॥

2 गुरुकुल कांगड़ी*

श्री कुलपति जी, अधिष्ठातागण उपस्थित देवियो एवं सज्जनो !

आज हिमालय के समीप गङ्गा जी के किनारे, गुरुकुल के पवित्र तथा प्रसन्न वातावरण में आप लोगों के बीच उपस्थित हो कर मैं बहुत खुश हूँ। और इस खुशी के लिए मुझे सर्वप्रथम पंडित इन्द्र विद्यावाचस्पति जी को धन्यवाद देना चाहिए, क्योंकि उन्होंने मुझे दीक्षान्त भाषण देने के लिए आमन्त्रित कर के यह सुअवसर दिया।

इस आमन्त्रण द्वारा उन्होंने मेरा बहुत भारी सम्मान भी किया है। सन् १९२१ में गुरुकुल को विश्वविद्यालय का रूप दिया गया और तब से आज तक देश के कई प्रतिष्ठित नेताओं द्वारा दीक्षान्त भाषण दिए गए हैं। महामना पंडित मालवीय डॉक्टर भगवानदास स्वामी श्रद्धानन्द डॉक्टर राजेन्द्रप्रसाद आचार्य नरेन्द्र देव गुरुदेव रवीन्द्रनाथ ठाकुर डॉक्टर राधाकृष्णन, राजर्षि टण्डन आदि की पंक्ति में मुझे रख कर पंडित इन्द्र जी ने मेरा जो सम्मान किया है उस के लिए भी मैं उन्हें धन्यवाद देता हूँ।

उन्नीसवीं शताब्दी के अन्त में भारतीय राष्ट्रीय कांग्रेस की स्थापना हुई और देश में राजनीतिक जागरण की एक नई लहर उठी। बंगाल के विभाजन के समय जो आन्दोलन उठा उस में भारत के नये राजनीतिक जागरण की शक्ति प्रकट हुई। उसी के फलस्वरूप नये भारत के नेता राष्ट्रीय शिक्षा के बारे में सोचने लगे और देश भर में ऐसे नये विद्यालय स्थापित हुए जिन का सरकारी विश्वविद्यालयों से—यूनिवर्सिटीज़ से—कोई सम्बन्ध न था और न उन्हें सरकार से कोई सहायता मिलती थी। स्वतन्त्र भारत की अपनी स्वतन्त्र शिक्षा प्रणाली का निर्माण करने के हेतु वे कटिबद्ध हुए थे और उसी दिशा में अग्रसर हो रहे थे। उन्हें असंख्य कठिनाइयों का सामना करना पड़ा और उन में से कतिपय विद्यालयों की अकाल मृत्यु भी हुई। परन्तु कुछ विद्यालयों के आचार्यों ने दुर्दमनीय ध्येयवादिता का परिचय दिया और अब

* हरिद्वार में दिया गया दीक्षान्त भाषण, अप्रैल, १९६७

कठिनाइयों का सामना करते हुए वे फलते-फूलते रहे। जादवपुर का इंजिनियरिंग कॉलिज शान्तिनिकेतन का विश्वभारती दिल्ली का जामिया मिलिया और हरद्वार का गुरुकुल कांगड़ी उसी राष्ट्रीय परम्परा में से हैं।

प्रारम्भ में मैं उस प्राचीन भारतीय शिक्षा-प्रणाली का वर्णन करूँगा जिस का कि आप समुचित परिवर्तन के साथ पुनरुज्जीवन करना चाहते हैं। वैदिक काल से जो शिक्षा-प्रणाली चलती आ रही थी उसी को सूत्रकारों ने नियमबद्ध कर दिया। पाँच वर्ष का होते ही बालक का विद्यारम्भ संस्कार किया जाता था और तब से उसे लिपि तथा संख्या सिखाना शुरू कर दिया जाता था। आठवें वर्ष में बालक का उपनयन किया जाता था। उपनयन केवल ब्राह्मण क्षत्रिय तथा वैश्यों के लिए ही नहीं अपितु शूद्रों के लिए भी सम्मत था। इन बातों का विस्तृत वर्णन आप को डॉक्टर राधाकुमुद मुकर्जी के 'एन्शियेण्ट इण्डियन एज्युकेशन' नामक ग्रन्थ में मिलेगा। उपनयन संस्कार को दूसरे जन्म का स्थान दिया जाता था और गुरु को पिता का। संस्कार के समय वेशभूषा, केशभूषा आदि के विषय में निश्चित नियम हुआ करते थे। इस संस्कार के बाद गुरु ब्रह्मचारी को शिष्य के रूप में स्वीकार कर लेता था। शिक्षाकाल में ब्रह्मचारी को घर-घर जा कर भिक्षा माँगनी पड़ती थी और गुरु के लिए लकड़ी पानी, फूल आदि इकट्ठे करने पड़ते थे। किन्तु गुरु के दुराचारी साबित होने पर उस का तिरस्कार करने का अधिकार भी विद्यार्थी को प्राप्त था। सूर्योदय से पूर्व ब्रह्मचारी जाग जाता था व तुरन्त ही स्नानादि से निवृत्त हो जाता था। सन्ध्या प्राणायाम आदि द्वारा वह रोज एकाग्रता का अभ्यास करता था। पादत्राण छत्र वाहन द्यूत नृत्य इत्र गायन आदि विलास की चीजें उस के लिए वर्ज्य थीं। वितंडावाद वार्तालाप मिथ्या भाषण निन्दा-निद्रा तथा काम क्रोध द्वेष लोभ आदि विकारों का चिन्तन निषिद्ध माने जाते थे। कर्तव्यपरायणता विनय आत्मविश्वास तथा निरहंकार वृत्ति का विकास किया जाता था। ब्रह्मचर्याश्रम की समाप्ति पर विद्यार्थी को एक कमरे में बन्द कर दिया जाता था ताकि उस के तेज से कहीं सूरज लज्जित न हो जाय। उसी दिन दोपहर विद्यार्थी तथा सूचक सारे चिह्न हटाये जाते थे और उसे सुगन्धित सामग्री से नहलाया जाता था। तब कहीं वह स्नातक गृहस्थाश्रम को स्वीकार करने के लिए घर लौटता था। इस विधि को समावर्तन संस्कार कहते थे और आज हम लोग भी उसी उद्देश्य से यहाँ एकत्र हुए हैं।

गुरुकुल परम्परा के पुनरुत्थान का स्वर्णिम स्वप्न महर्षि दयानन्द सरस्वती ने देखा था और उसे पूर्ण रूप देने का परिश्रम स्वामी श्रद्धानन्द

जी ने किया। संसार का इतिहास इस का साक्षी है कि पुण्यात्माओं के स्वप्न सच्चे साबित होते हैं और उन के व्रत असफल नहीं होते। स्वामी श्रद्धानन्द जी इस प्राचीन परिपाटी को पुनरुज्जीवित करना चाहते थे जिस के अन्तर्गत बालक उपनयन संस्कार के पश्चात् ब्रह्मचर्य व्रत को धारण कर के ज्ञान तथा विज्ञान की प्राप्ति के लिए १२ वर्ष गुरु के घर रहा करता था। इस पुनरुज्जीवन द्वारा वे प्राचीन संस्कृति तथा आधुनिक विज्ञान का समन्वय कराना चाहते थे। हिन्दी को शिक्षा का माध्यम बना कर वे विद्यार्थियों में आत्म विश्वास तथा देश प्रेम जागृत करना चाहते थे। सन् १६५० में गुरुकुल की स्वर्ण-जयन्ती के अवसर पर बम्बई के राज्यपाल श्रीप्रकाश जी ने बताया कि जिस समय स्वामी जी ने अपना कार्य प्रारम्भ किया था उस समय आशा की बहुत कम रेखाएँ चारों ओर दीख पड़ती थीं। यह उन के प्रबन्ध साहस और उत्कट उत्साह का उदाहरण है कि उन्होंने हमारी शिक्षा को सच्ची राष्ट्रीय और सर्वथा स्वतन्त्र बनाने का विचार ही नहीं किया अपितु उस विचार पर जंगल में बैठ कर अपने हाथ कमण्डी कर के और जंगली जानवरों का सामना कर के इस विद्यालय की स्थापना की। उन्हीं की आन्तरिक आकांक्षा उन की सहायक थी और यह बड़े सन्तोष का विषय है कि उन के लगाये हुए पौधे ने इतने बड़े और दृढ़ वृक्ष का रूप धारण किया जिस की शाखाओं की छाया में कितने ही विद्यार्थियों ने उचित और उपयुक्त शिक्षा प्राप्त कर अपने शारीरिक मानसिक और आध्यात्मिक जीवन को सुसंगठित कर के देश और समाज की सेवा की।

गुरुकुल की उपाधियों तथा प्रमाण-पत्रों को सरकारी मान्यता प्राप्त न होने के कारण उसकी प्रगति तथा लोकप्रियता में रुकावट सी आया करती थी किन्तु भारत स्वतन्त्र हो जाने पर ये रुकावटें हट गई हैं और हरद्वार का गुरुकुल एक प्रतिष्ठा प्राप्त शिक्षा-केन्द्र बन गया है। १८ सितम्बर १६५१ को भारत सरकार ने यूनियन पब्लिक सर्विस कमीशन से परामर्श करने के बाद एक विज्ञप्ति द्वारा यह घोषित कर दिया कि सन् १६५६[1] तक गुरुकुल विश्व विद्यालय द्वारा दी गई 'अलंकार' की उपाधि को बी ए के बराबर माना जाएगा और 'विद्याधिकारी' प्रमाण-पत्र को मैट्रिक्युलेशन के बराबर माना जाएगा।

सन् १६४८ ४६ में डॉक्टर राधाकृष्णन् की अध्यक्षता में विश्वविद्यालय शिक्षा की समस्या के बारे में सरकार का मार्ग-दर्शन करने के लिए जो आयोग

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१ केन्द्रीय सरकार ने यह अवधि १६६८ तक कर दी है—कुलाधिष्ठाता।

नियुक्त किया गया था उसने अपने प्रतिवेदन में विश्वभारती तथा जामिया मिलिया को विश्वविद्यालय घोषित कर देने की सिफ़ारिश की थी किन्तु गुरुकुल काँगड़ी के बारे में कुछ नहीं कहा था।

राधाकृष्णन् आयोग की सिफ़ारिश के अनुसार भारत सरकार ने संसद् के सम्मुख विश्वविद्यालय अनुदान आयोग विधेयक अर्थात् यूनिवर्सिटी ग्राण्ट्स कमीशन बिल प्रस्तुत किया जिसे संसद् ने स्वीकार कर अधिनियम अर्थात् एक्ट का रूप दे दिया। इसी अधिनियम के अधीन एक आयोग स्थापित हुआ है जिसका कि मैं वर्तमान अध्यक्ष हूँ। इस अधिनियम की धारा ३ द्वारा किसी संस्था को विश्वविद्यालय के रूप में मान्यता देने की सिफ़ारिश केन्द्रीय सरकार से करने का अधिकार इस आयोग को दिया गया है। गुरुकुल काँगड़ी के तथा कुछ अन्य संस्थाओं के विश्वविद्यालय घोषित किये जाने का अथवा उनकी उपाधियों को मान्यता देने का प्रश्न इस आयोग की एक समिति को सौंपा गया है और समिति ने इस मामले में अभी कोई अन्तिम निर्णय नहीं किया है। समिति को इस मामले का कई पहलुओं से विचार करना होगा। पहले उसे उन तत्त्वों का निर्धारण करना होगा जिनके आधार पर किसी संस्था को विश्वविद्यालय की श्रेणी में रखा जा सके। फिर उसे प्रत्येक प्रार्थी संस्था के विषय में पूरी वस्तु-स्थिति मालूम करनी होगी। इसके पश्चात् यह सिफ़ारिश की जा सकती है कि किसी विशिष्ट संस्था को विश्वविद्यालय की श्रेणी में रखा जाए अथवा नहीं। इस स्थिति में मुझे सर्वप्रथम एक बात स्पष्ट कह देनी चाहिए कि मैं जो कुछ भी आज यहाँ कहूँगा उसे विश्वविद्यालय अनुदान आयोग का अधिकृत अभिमत न मान लिया जाय। मैं अपनी तरफ से आज तथ्यों की बजाय आदर्शों का विश्लेषण करने की ही कोशिश करूँगा जिससे कि तथ्यों की छान-बीन करने वाली उस समिति की कार्यवाही पर कोई अनुकूल या प्रतिकूल प्रभाव न पड़े।

गुरुकुल काँगड़ी की विशेषता यह मानी जाती है कि यहाँ नवयुवकों के चरित्र-निर्माण की ओर अधिक ध्यान दिया जाता है। विद्यार्थियों में संयम आत्म-विश्वास निर्भयता सादगी औदार्य सत्यपरायणता नियमितता आदि सद्गुणों का विकास करने के हेतु यहाँ अनेक उपायों का प्रयोग किया जाता है। आठ वर्ष से अधिक आयु के बच्चों को गुरुकुल में प्रवेश नहीं दिया जाता और एक बार गुरुकुल में प्रविष्ट होने पर विद्यालय अवस्था में अर्थात् ८ से १८ वर्ष तक उन्हें साधारण तौर पर गुरुकुल के वातावरण से अलग नहीं होने दिया जाता। गुरुकुल के निसर्गरम्य तथा शान्त वातावरण में ही बच्चों

की स्वाभाविक प्रवृत्तियों को संस्कृत किया जाता है और इस कालावधि में उन्हें बाहरी दुर्गुणों के संसर्ग से अलग रखने का प्रयत्न किया जाता है। ८ से १८ वर्ष की आयु तक विद्यार्थी के जीवन के प्रत्येक क्षण पर अधिकार जमा कर गुरुकुल एक गम्भीर ज़िम्मेदारी का बोझ उठाता है। मुझे आशा है कि इस गम्भीर ज़िम्मेदारी को निभाते समय मानसशास्त्र के नवीनतम सिद्धान्तों का पूरा ध्यान रखा जाएगा। हमें अपनी पुरातन परम्परा पर अभिमान अवश्य होना चाहिए किन्तु साथ ही साथ मानवीय ज्ञान के विकास के अनुसार अपनी परम्परा में आवश्यक परिवर्तन करने की तैयारी भी हमें रखनी चाहिए। पुराने ज़माने में जब कि गुरुकुल की परिपाटी चलती आ रही थी नगरीय जीवन में तथा वनवासी जीवन में इतना अन्तर नहीं था जितना कि आज हो गया है। नगरों में अच्छे घर हुआ करते थे सड़कें भी अच्छी थीं और अन्न तथा वस्त्र भी अधिक अच्छे तथा आसानी से मिल जाते थे। नगरों से दूर अरण्यों में बसने वाले गुरुकुलों में ये सारी सुविधाएं उपलब्ध नहीं हुआ करती थीं। बस इतना ही कुछ अन्तर था। गुरुकुल में ज्ञान तप और शील की उपासना करके बारह साल बाद घर लौट आने वाले नवयुवक को फिर से बसाने की कोई समस्या खड़ी नहीं होती थी क्योंकि गुरुकुल की दुनिया में और तत्कालीन गृहस्थी जीवन में विशेष अन्तर नहीं था। लेकिन आज यदि हम किसी बच्चे को ८ से १८ वर्ष तक की आयु में जंगल में बन्द करके लिखना-पढ़ना सिखाएं और उसके बाद उसे बिजली रेडियो टेलिफ़ोन रेलगाड़ी हवाई जहाज़ सिनेमा टेलिविज़न आदि से भरी हुई मायानगरी में छोड़ दें तो बस उसकी वही दशा होगी जो दुर्योधन की मयसभा में हुई थी; उसकी दयनीय स्थिति पर बालिकाएं भी हँस पड़ेंगी। यह तभी होगा जब कि हम अपनी पुरातन परम्परा का अन्धानुकरण करेंगे और गुरुकुल की गतिविधि में कुछ भी परिवर्तन करना अस्वीकार करेंगे। मुझे खुशी इस बात की है कि आप इस प्रकार का अन्धानुकरण नहीं कर रहे हैं। आप ने इस गुरुकुल में बाहर की दुनिया जैसी एक प्रति-सृष्टि बनाई है जो कोपिष्ठ राजर्षि विश्वामित्र ने भी की थी। इस गुरुकुल में पलने वाला बालक बाहर की दुनिया में असफल नहीं रहेगा।

इस विषय में और भी एक बात का सदैव ध्यान रखा जाना चाहिए। कितनी भी कोशिश करने पर आज हम किसी बालक को बाहरी आकर्षणों से या लालचों से पूर्णतया अलिप्त नहीं रख सकते। हाँ शायद आप उसे उन आकर्षणों का अनुभव नहीं करने देंगे लेकिन उन के दर्शन

से आप उसे नहीं रोक सकते। इस हालत में आधुनिक मानस-शास्त्र का एक सिद्धान्त हमें अवश्य याद रखना चाहिए। भीति के वातावरण में भीति का विकास नहीं हो सकता। बालक की स्वाभाविक प्रवृत्ति को कठोर निग्रह करने से उस का सारा जीवन विकृत तथा अस्तव्यस्त बन जाता है। बच्चे के नैसर्गिक लालच को क्रूरता से कुचल दिया जाय तो वह मन ही मन में सारी दुनियाँ को अपना दुश्मन मानता है और उस का सारा जीवन एक शोकपूर्ण नाटक बन जाता है। हम चरित्र का विकास कर सकते हैं, लेकिन उसे दाब नहीं सकते। हमें स्वाभाविक प्रवृत्तियों का उन्मूलन नहीं करना है, केवल उन्हें संस्कृत करना है। इस बात का ध्यान न रखने से विनायकं प्रकुर्वाणो रचयामास वानरम्' वाला किस्सा होने का डर बना रहता है।

पंडित इन्द्र विद्यावाचस्पति जी द्वारा मेरी जानकारी के लिए गुरुकुल काँगड़ी के बारे में जो विवरणात्मक साहित्य भेजा गया था उस से पता चलता है कि जुलाई सन् १९२१ में वेद महाविद्यालय तथा साधारण महाविद्यालय को मिला दिया गया है और इस मिलन से पहले वेद महाविद्यालय में विद्यार्थियों की संख्या १२ और अध्यापकों की संख्या ४ थी। इसी प्रकार साधारण महाविद्यालय में ९ विद्यार्थी तथा ८ अध्यापक थे। इन संख्याओं का जोड़ लगाने से यह दिखाई देता है कि गुरुकुल काँगड़ी की उच्च शिक्षा में २१ शिष्यों के अध्यापन का कार्य १२ गुरुजन करते हैं। कलकत्ता जैसे कई भारतीय उच्च शिक्षा-केन्द्रों में ५० विद्यार्थियों के पीछे १ अध्यापक उपलब्ध होता है। इस विषय में आधुनिक शिक्षा-विज्ञों का निष्कर्ष यह है कि प्रावश्य पढ़ाई के लिए गुरु-शिष्यों का अनुपात १ : १० होना चाहिए।

गुरुकुल के आयुर्वेद महाविद्यालय में विवरण काल में विद्यार्थियों की संख्या ७१ थी और अध्यापकों की १०। गुरुकुल का विद्यालय-विभाग (हाई स्कूल) भी अच्छी प्रगति कर रहा है। उस में विद्यार्थियों की संख्या ३०३ और शिक्षकों की २३ थी। गुरुकुल की विविध शाखाएं अन्य स्थानों में भी चल रही हैं जैसे कि देहरादून, कुरुक्षेत्र मटिंडू लुधियाना मज्जफर सूपा इन्द्र प्रस्थ, हैदराबाद वैद्यनाथ-धाम तथा वाजीपुरा। गुरुकुल के इस केन्द्र-स्थान में दिन प्रतिदिन विस्तार हो रहा है। गुरुकुल का अपना पुस्तकालय वाचनालय पुरातत्त्व संग्रहालय प्रकृति विज्ञान-संग्रहालय वनस्पति वाटिका, चिकित्सालय औषधशाला शिल्पशाला मुद्रणालय तथा मासिक-पत्रिका है। बिजली तथा पानी का उस का अपना यथावत् प्रबन्ध है। इस से यही जाहिर होता है कि गुरुकुल समय के साथ कदम मिला कर चलना चाहता है।

सन् १९२६ में गुरुकुल के स्नातकों के सम्मुख दीक्षान्त भाषण देते हुए तिलक विद्यापीठ पूना के तत्कालीन कुलगुरु पंडित चि. वि. वैद्य ने पाश्चात्यों से आधुनिक विज्ञान तथा यन्त्र-तंत्र सीखने पर जोर दिया था और स्पष्ट किया था कि विज्ञान की इस प्रगति का वेदों से कोई विरोध नहीं है। उस समय उन्होंने एक पौराणिक कथा भी सुनाई थी जिस में कि देवों का असुरों से संजीवनी विद्या प्राप्त करने का वर्णन है।

आजकल ज्ञान तथा विज्ञान के बीच भेद बताया जाता है। केवल सांस्कृतिक तथा सामाजिक विषयों के निरूपण को ज्ञान माना जाता है और भौतिक सृष्टि के निरूपण को विज्ञान कहा जाता है। कुछ लोग ज्ञान तथा विज्ञान की तुलना करने लगते हैं और एक को श्रेष्ठ बता कर दूसरे को तुच्छ साबित कर देते हैं। मेरी राय में मानव-समाज को ज्ञान तथा विज्ञान दोनों की आवश्यकता है। मानवी जीवन के उद्देश्य की चर्चा करके जीवन मूल्यों को स्थिर करने तथा संसार की विविध वस्तुओं का मूल्यानुसार अनुक्रम लगाने के लिए ज्ञान की आवश्यकता है और इन वांछित वस्तुओं को भौतिक सृष्टि से आसानी से प्राप्त करने के लिए विज्ञान की आवश्यकता है। अर्थात् ज्ञान तथा विज्ञान के बीच विरोध नहीं अपितु सामञ्जस्य है। हाँ यह सत्य है कि विज्ञान के क्षेत्रों में दिन प्रतिदिन जो प्रगति हो रही है उसकी तुलना में सांस्कृतिक तथा सामाजिक क्षेत्रों में कोई चमत्कारक आविष्कार दिखाई नहीं देता। इसी प्रकार यह भी स्वाभाविक है कि भारत जैसे पिछड़े हुए देश में भौतिक समृद्धि बढ़ाने के लिए विज्ञान की प्रगति पर अधिक बल दिया जाए। परन्तु ज्ञान की मजबूत नींव न होने पर विज्ञान का महल खतरनाक बन कर रहेगा।

इस प्रकार विज्ञान के अध्ययन अध्यापन के बारे में भी विवाद होते रहते हैं। कुछ लोग विज्ञान के क्षेत्र में मौलिक अथवा सैद्धान्तिक गवेषणा को प्राधान्य देते हैं और कुछ अन्य लोग मौलिक गवेषणा की अपेक्षा उपयुक्त यन्त्र शिल्प आदि की खोज को अधिक महत्व देते हैं। हम सब को एक बात माननी होगी कि भारत आज औद्योगिक क्रान्ति के द्वार पर खड़ा है। पुरातन कृषि प्रधान तथा शान्ति प्रधान व्यवस्था के गर्भ में विद्युत्-यन्त्र चालित गतिमान उद्योग जन्म ले रहे हैं। इस क्रान्ति के लिए सर्वस्व कारीगरों शिल्पकों तथा यन्त्रज्ञों की आवश्यकता होगी। यदि हम इस स्पर्धाशील दुनिया में अपना स्वातंत्र्य बनाये रखना चाहते हैं और जनता का जीवन-स्तर उठाकर समाजवादी व्यवस्था के

अपने उद्घोषित ध्येय की ओर अग्रसर होना चाहते हैं तो हमें अपने शिक्षा ध्येय में इस बात का प्रबन्ध पहले करना होगा।

परन्तु इस यान्त्रिकीकरण का मतलब यह नहीं है कि मानव का सारा जीवन ही यंत्रवत् बन जाय। डॉक्टर राधाकुमुद मुकर्जी ने अपने उपरि निर्दिष्ट ग्रन्थ में कहा है कि उद्योग तथा शिक्षा के क्षेत्रों में भारत सदैव घरेलू व्यवस्था में विश्वास करता आया है। भारत में एक जैसी अनेक चीजें बनाने के कारखाने या फ़ैक्टरियाँ कभी नहीं थे। कलात्मक वस्तु मानव की कुशलता से बनती है न कि मशीन से। मानव की आत्मा का विकास भी एक अत्यन्त कलात्मक कार्य है। शिष्य की आत्मा का विकास गुरु की कुशलता पर निर्भर होता है। गुरु तथा शिष्य के बीच जो आदान प्रदान होता है उसे ही शिक्षा कहा जाना चाहिए। शिष्य तो किसी गुरु का होता है न कि किसी अहस्म संस्था का। किन्तु आजकल के विद्यालयों में 'कक्षाओं' को सिखाया जाता है शिष्यों को नहीं। यह साँचे में ढालने का फ़ैक्टरी वाला तरीका उतना ही बुद्धिमत्तापूर्ण है जितना कि सब मरीजों का एक ही इलाज करने का। मानव की आत्मा मन तथा बुद्धि जैसी सूक्ष्म एवं गूढ़ वस्तुओं को एक-से साँचे में कैसे ढाला जा सकता है? आज की समाजवादी सरकार को भी शिक्षा का यान्त्रिकीकरण नहीं करना चाहिए।

नये भारत की शिक्षा-प्रणाली यंत्रवत् न होते हुए भी सस्ती होनी आवश्यक है क्योंकि भारत में शिक्षा की माँग प्रतिदिन बढ़ती जा रही है। स्वातंत्र्य प्राप्ति के पहले वर्ष में भारत के विश्वविद्यालयों में कुल २१० ०० विद्यार्थी थे और आज यही संख्या ७२ ०० तक बढ़ गई है। कलकत्ते के एक कालेज में एक साथ ११०० विद्यार्थी पढ़ाई कर रहे हैं इन आँकड़ों की तुलना में गुरुकुल के प्रयत्नों का फल अभी कुछ कम दिखाई देता है। गुरुकुल की अपनी २५०० एकड़ जमीन है ११ लाख रुपये की इमारतें हैं, लगभग ८॥ लाख रुपये की स्थायी निधि है और गुरुकुल का प्रति वर्ष का आय-व्ययक २ लाख रुपये से अधिक होता है। इतनी भारी लागत पर ४० वर्ष परिश्रम करने पर भी केवल ६० विद्यार्थी गुरुकुल के स्नातक बन कर निकले हैं तो सोचना चाहिए कि इस के क्या कारण हैं? इन कारणों का पता लगा कर उन्हें दूर करना होगा ताकि आप की आकांक्षाओं के अनुसार गुरुकुल कांगड़ी आधुनिक भारत का एक आधुनिक विद्यालय बन सके।

अन्त में मैं नवस्नातकों से कुछ शब्द कहना चाहता हूँ जो कि आज गुरुकुल के आदर्शपूर्ण वातावरण को छोड़ कर व्यवहारी एवं व्यापारी दुनिया में प्रवेश करने जा रहे हैं। यह दुनिया बहुत गतिमान है और उसमें वैज्ञानिकों

तथा शिल्पकों की माँग बहुत ज्यादा है लेकिन उन से भी अधिक आवश्यकता ऐसे लोगों की है जिनके चरित्र न्यायप्रियता तथा कर्तृत्व-शक्ति में विश्वास किया जा सके। सदियों की गुलामी के कारण हम पिछड़े हुए हैं और उन्नत देशों की पंक्ति में शामिल होने के लिए हमें अत्यधिक प्रयत्न करने होंगे। यह काम भी उतना ही मुश्किल है, जितना कि स्वातन्त्र्य प्राप्ति के लिए प्रयास करना था। सदियों की गुलामी के कारण हम लोगों में कुछ बधिरता सी आ गई है। अन्याय अशिष्टता या असत्य को हम आसानी से सह लेते हैं। यह नैतिक बधिरता हमें त्यागनी होगी और यह काम आप जैसे नवयुवकों को करना होगा। आप बड़ी भावुकता से जिस दुनिया प्रविष्ट होंगे उस दुनिया में सुख साधनों की बहुत कमी होगी और उन्हें प्राप्त करने के लिए काफी खींचातानी नजर आयेगी। इस खींचातानी का नैतिक स्तर बहुत गिरा हुआ दिखाई देगा। सत्ता-लाभ कुटिलता मिथ्याचार न्याय के प्रति उदासीनता आदि दुर्गुणों का बोलबाला भी आप सर्वत्र पायेंगे। इस प्रतिकूल हवा में आपके चरित्र के बल की परीक्षा होगी। इस हवा को बदल देने का काम आप जैसे सुसंस्कृत तथा दृढ़ चरित्र नवयुवकों को करना है। यह स्वाभाविक है कि आप में से प्रत्येक युवक कोई अद्वितीय पराक्रम न कर सके किन्तु किसी समाज की प्रगति का असली नाप तो उसके साधारण नागरिक के चरित्र तथा कार्य-क्षमता से ही लगाया जा सकता है। यह ठीक है कि संस्कृति तथा सभ्यता का विकास कुछ इने-गिने असामान्य दार्शनिकों के प्रयत्नों से होता है। लेकिन असामान्य तो आखिर असामान्य ही रहेंगे। सामान्यों के बस में एक बात हमेशा हो सकती है। वे अपने चरित्र पर अचल रह सकते हैं और सारे समाज की प्रगति में सहायता कर सकते हैं। आप ऊँचे या नीचे किसी पद पर भी काम करें मैं आपसे यही निवेदन करूंगा कि पूरा दिल लगा कर काम करिये और अपने चरित्र को बनाये रखिए। ऊँचे नीच पद से चरित्र का कोई सम्बन्ध नहीं है। उलटा मैंने तो यह देखा है कि गरीब आदमी चरित्र की जितनी इज्जत करता है उतनी अमीर भी नहीं करता। मानव-जाति का आज तक का अनुभव बताता है कि सच्चरित्र द्वारा प्राप्त आनन्द की तुलना में सब भौतिक-जन्य सुख फीके पड़ जाते हैं। और हम सब लोग जीवन में अधिक से अधिक आनन्द के अलावा क्या चाहते हैं?

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BHARATIYA SANSKRITI SAMMELAN*

I am deeply appreciative of the honour you have done me by inviting me to preside over this 8th Session of the Bharatiya Sanskriti Sammelan. I know Sanskrit a little and am familiar with the broad features of our culture. But I cannot claim to have made a special or scientific study of matters cultural. What you expect of me, I do not know. But I shall endeavour to place before you such views as I have formed after reflecting on matters relevant to the possible purpose of a sammelan such as this. Before I state them I consider it necessary to give the background to my views formed by what I have read about the essential characteristics of human culture and the growth and traits of India's culture. In my opinion such a perspective is necessary for forming correct judgments in regard to the direction of the future work of the Sammelan both of the nature of propaganda, and of executive action. In doing so, I shall be drawing heavily on the work of experts in the field to adapt Kalidas a little

अथवा कृतवाग्द्वारे कार्येऽस्मिन् पूर्वसूरिभि ।
मणौ वज्रसमुत्कीर्णे सूत्रस्येवास्ति मे गतिः ॥

Let me parenthetically say here how glad I am to be presiding over a culture sammelan in the valley of the Narmada, a valley familiar to me from my administrative days. Archaelogically this valley is very rich in pleistocene mammal, fauna and palaeoliths, old stone implements of 500 000 years ago i.e. about the same period after the appearance of man in the world. An archaeologist says: If life's past, present and future on our planet are plotted on a twenty four hour clock, it will be seen

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* Presidential Address delivered on 17th November 1956 at Piparia (Madhya Pradesh).

that man appeared in the world only about a second and a half ago

Our ancestors made a brilliant and inspired calculation of the age of the solar system which tallies remarkably with modern scientific estimates converging round 3 000 million years

For much of the following I am indebted to Ruth Benedict Anthropologist of international standing who has written on Patterns of Culture Race and Racism and other books. Race and Racism gives numerous quotations on which I have drawn liberally but it is not possible within the space and time at my disposal to give the origin of the quotation in each case It is sufficient to say that to anyone especially interested the exact origin of the thoughts here expressed can be pointed out

Since biological change occurs slowly and cultural changes occur in every generation it is futile to try to explain the fleeting phenomena of culture by a racial constant. We can often explain them in terms of contact with other peoples of individual genius of geography but not by racial differents.

The growth and spread of civilization has gone on with a serene indifference to racial lines. All groups who have had an opportunity to acquire civilization have not only acquired it but also added to its content. Conversely no group has been able to develop a rich or complex culture when it was isolated from outside contacts

If we can once thoroughly convince ourselves that race in its only intelligible that is biological sense is supremely indifferent to the history of languages and cultures, that these are no more directly explainable on the score of race than on the laws of physics and chemistry we shall have gained a viewpoint that allows a certain interest to such mystic slogans as Slavophilism, Anglo-Saxondom Teutonism and the Latin genius, but quite refuses to be taken in by any of them.

The so-called racial explanation of differences in human performance and achievement is either an ineptitude or a fraud

Races as irreducible categories exist only as fictions in our brains.

The different races of man are not distinguished from each other by strongly marked uniform and permanent dis-

tinctions, as are the species belonging to any given tribe of animals. All the diversities which exist are variable and pass into each other by insensible gradations.

Every civilized group of which we have record has been a hybrid group, a fact which disposes effectually of the theory that hybrid peoples are inferior to purebred ones

There is no necessity to postulate the existence of a specific and universal instinct of racial antipathy while on the other hand there is strong positive evidence that such an instinct does not exist. An adequate explanation of racial antagonisms can be found in impulses and motives that are independent of race These impulses and motives, however though not racial in their origins may become racial through being connected in the mind with the thought of another race. When this association takes place the feelings may be aroused by contact with any member of that race, and operate with all the force of an instinctive antipathy

The sociologist who is satisfied with human society as now constituted may reasonably decry race-crossing But let him do so on social grounds only He will wait in vain, if he waits to see mixed races vanish from any biological unfit ness A Brazilian statesman said, in South America their experience of centuries has taught them that there is no real understanding except the one that comes through the fusion of races.

Biologists therefore do not hesitate to say that all exist ing and genuine knowledge about the way in which the physical characteristics of human communities are related to their cultural capabilities can be written on the back of a postage stamp that in regard to really important characteristics, the natural differences between the races pale into insignificance beside the natural differences between individuals so much so that an impartial science of genetic improvement could not afford to take the former into account at all in its procedure. They go on to say when it is remembered that we are still uncertain whether hereditary differences have any part at all in causing the class differences in intelligence while it cannot be denied that the environment has some hand in this, the

priority of environmental over genetical methods of raising the general level of intelligence becomes obvious

Of all vulgar modes of escaping from the consideration of the effect of social and moral influences on the human mind, the most vulgar is that of attributing the diversities of conduct and character to inherent natural differences.

Race is the cheap explanation tyros offer for any collective trait that they are too stupid or too lazy to trace to its origin in the physical environment, the social environment, or historical conditions

Heredity may explain a part of the pronounced mental similarities between parents and children, but this explanation cannot be transferred to explain on hereditary grounds the similarity of behaviour of entire nations in which the most varied lines occur These assume their characteristic forms under the pressure of society Cultural differences are only passing products of the milieu having come about as the result of external circumstances: they disappear in the same way Racial moral traits are not due to inherent nature to essential character to brain structure nor are they transmitted from father to son by the mere fact of physical generation. On the contrary the distinguishing ethical characteristics of races are determined by the dominant social order and vary with it.

Men indeed differ in learning but are equal in the capacity for learning, there is no race which under the guidance of reason cannot attain to virtue. If we were to select the most intelligent imaginative energetic and emotionally stable third of mankind all races would be represented

All reputable anthropologists condemn the malignant nonsense about racial psychology which is preached and published by those who try to justify the oppression of ethnic minorities as in South Africa. Political theories about race are nothing more than instruments of propaganda, devised for the child minds of regimented populations Racism is a method of bolstering up self esteem and lust for power by means of beliefs which have nothing in their favour except that they are flattering At best, however belief in race dogma is just the same as national chauvinism, a symptom of immaturity

lack of experience and in general of an intellectually poor individuality

In the gain or loss of one race all the rest have equal share There is no irrepressible conflict between Oriental and Western civilization On the contrary they are complementary to each other not necessarily competitive.

Every effort of the Negro or the South African to move, to raise and improve his social status, rather than his condition has invariably met with aroused prejudice, opposition, even shocking tyranny and stimulated racial animosities. Race prejudice so conceived is merely an elementary expression of conservatism. Race thus has a profound social significance It is made the symbol of cultural status and thus serves to justify the exploitation of the weaker group with the inevitable political and cultural consequences. Being a symbol of cultural status it serves automatically to classify individuals, and so to retard their advance by limiting their freedom and determining the cultural values to which they have access Scientists can easily show how groundless is the claim that one race, one nation, or one class has any God-given right to rule

Race therefore, cannot count for all human differences Instinct in man is not as in a bird or ants and does not lay down inexorably his whole way of life Man has developed his plasticity so that his intelligence can operate fully He reacts to his environment more completely and more quickly than any other creature. The influence of environment on any one individual however is limited by his life span a short time as compared to the periods over which civilizations have lasted in which special influences were brought to bear consistently on generation after generation. But whether for long or short period societies have always been overwhelmingly effective in moulding human material in different ways because man is a highly gregarious animal and he always wants the approval of his fellows provided he has first succeeded in getting the means of keeping alive His society may recognise conquest and he will engage in conquest; it may recognise wealth and he will measure success by dollars and cents or pounds, shillings pence or rupees and paisa,

it may recognise caste and he will behave in all things according to the position to which he was born. Recalcitrant individuals there may be as artists or authors or tyrants but the great majority in any continuing civilization take the mould which is set by cultural institutions The social institutions of any one society are not inevitable expressions of racial genius for other societies similar to them may have radically different ones. The social environment in our own cultural background as well as in the primitive world has been favourable now to one kind of achievement now to another Conditions since ancient times have been favourable now in one place and now in another for certain achievements both in India and in the world In modern times outside India there have also been now and again periods of great freedom and well being directed however not so much towards the spiritual or intellectual life or artistic creation as towards the conquest of the material world and the acquisition of wealth In these fields men have achieved the great and characteristic success of modern times, and the personality type which can best succeed in this endeavour has become increasingly prevalent, with various modifications, in nation after nation Wherever we look in the history of civilization we find that favoured groups have achieved brief brilliant success when they were assured economic sufficiency and freedom of opportunity in certain directions. When these favourable conditions no longer existed the torch soon fell from their hands. With growing literacy and extension of voting privileges and the spread of common ideas up and down the whole scale of population in modern nations, this selective restriction of social opportunities no longer works so satisfactorily as it did in earlier times. Although serf mentality has been destroyed systematically more or less throughout the world the rank and file in many countries are still shut up from the major goods of life Economic sufficiency is far from general and therefore essential liberties such as opportunity to work, freedom of opinion on moot points and equality of civil liberties are far from won If we are serious in our hopes for the human race we shall have to devote ourselves to provide those social conditions in which it can fulfil itself

In a resolution passed by the American Anthropological Association in December 1938 it was resolved among other things that the terms "Aryan" and "Semitic" have no racial significance whatsoever and that they simply denote linguistic families that Anthropology provides no scientific basis for discrimination against any people on the ground of racial inferiority, religious affiliation or linguistic heritage At their Annual Meeting held about the same time American Psychologists held that in the scientific investigations of human groups by psychologists no conclusive evidence has been found for racial or national differences in native intelligence and inherited personality characteristics. They concluded that certainly no individual should be treated as an inferior merely because of his membership in one human group rather than another

Biologists assembled at their Seventh International Genetics Congress also about the same time held that the effetive genetic improvement of mankind is dependent upon major changes in social conditions and correlative changes in human attitudes and that there could not be valid basis for estimating and comparing the intrinsic worth of different individuals without economic and social conditions which provide approximately equal opportunities for all members of society instead of stratifying them from birth into classes with widely different privileges that it cannot be expected that the raising of children will be influenced actively by considerations of the worth of future generations unless parents in general have a very considerable economic security and unless they are extended such adequate economic, medical educational and other aids in the bearing and rearing of each additional child that the having of more children does not overburden either of them. These objects cannot be achieved unless there is an organisation of production primarily for the benefit of consumer and worker unless the conditions of employment are adapted to the needs of parents and especially of mothers and unless dwellings, towns and community services generally are reshaped with the good of children as one of their main objectives.

From this general statement of the relation of race t

culture I shall pass on to the story of Indian culture In 1953 in his Presidential Address to the 19th Session at Ahmedabad Dr Suniti Kumar Chatterjee *whose appointment as Chairman* of the Sanskrit Commission I heartily welcome pointed out *how the Indian people* are a mixed people in blood, in speech and in culture He observed that the fundamental unity of man is a proposition which if properly realised and not merely theoretically admitted will enable us to think of racial miscegenation without repugnance as a most natural thing in human relation

In India this unity of man came to be regarded as part of the All-Comprehensive Reality—the Supreme Self or the Over-Soul According to him the division of mankind by *racial or cultural groups is inspired by the desire for power and* pelf which dominates and underlies all organised movements *for economic, political religious and cultural expansion* But just as no man is an island to himself so is no race or people or country basically separated or isolated from the others.

The fundamental trait of Indian civilization is a harmony of contrasts, a synthesis creating a unity out of diversity It is broad and expansive and all-comprehensive like life itself

The Indian synthesis apart from a most remarkable intermingling of material cultures and religious and social cults and customs, as well as doctrines and notions, is based on the *higher intellectual and idealistic plane on the following* a sense of the unity of all life as an expression of an unseen reality which is both *transcendent and immanent* a *desire for* synthesis seeking to combine apparently disconnected or discordant fragments in life as well as experience in their proper place in essential unity a rigid adherence to the intellect while seeking to harmonize it in the higher plane with emotion, intuition mystic perception, recognition of the sufferings and sorrows of life and an attempt to remove them by going to *their root cause* a feeling for the sacredness of all life and above all, a great tolerance for all other beliefs and points of view The realization of *this ultimate reality is the Summum Bonum* in life and the paths for this realization are recognised to be various according to individual training, temperament or

predilection whether of knowledge or love or self-discipline or good deeds and grace even so the ultimate Reality manifests itself in innumerable ways before the ken and cognisance of man Its conception of the material world transcends time and space, and matter and energy are just different forms of the same physical stuff, which is but an outward manifestation of this unseen reality All this synthesising tendency has been induced and made easy of development by the great fact of the presence in the Indian scene from very ancient times of different peoples with their diverse languages and cultures and modes of living and thinking

India received all her human inhabitants who came in successive waves from abroad representing six main races in their nine ramifications and speaking among them languages belonging to at least four different speech families which are still current, in addition to those that are now extinct The negroids from Africa with very scanty trace on Indian civilization and among the Indian peoples (few tribes in South India speaking dialects of Tamil) the proto-australoids from Palestine some of whom passed out of India as far as Australia (Mundas of Central India Khasis of Assam Those who stayed on in India allied to mon-khmer groups became the Austrico-Santalo Mundas, Korkus Gadabas and Savaras They gave some basic things in the material and spiritual domains to Indian civilization like the [illegible] cultivation of rice of some plants and vegetables, the domestication of the fowl the tanning of the element the [illegible] of cotton and some notions about future life later integrated with the help of other elements into the doctrines of transmigration and Samsara.

They were followed by the mongoloid peoples from the East—traces in north and north-ea[illegible]minant element in Indian civilization Next the Dravidians from East Mediterranean or Asia minor, probably before 3500 B.C. highly advanced with a civilization as opposed to the village culture which was the great contribution of the Austrico The[illegible] Aryan people of the Punjab, Sindh and Rajasthan [illegible] believed to have built up great city cultures like [illegible]

Harappa Mohenjadaro are now generally regarded as having been Dravidian in speech religion and social and political organisation. They had a script of their own, not yet deciphered According to Dr Chatterjee *the basic culture of* India is certainly over 50 percent Dravidian although expressed in the main through the Aryan language. And finally came the Indo-Aryan Sect of the great Indo Iranian branch of the Indo-European speakers who became a powerful force and leaven in the civilization of the Middle and Near East and of Europe from about 2000 B C. It was the Vedic or Aryan period which witnessed the creation of the *Indian* man, out of the fusion of these four ingredients Austric, mongoloid Dravidian and Aryan

Racially speaking a common Indian type evolved through inter mixture particularly on the plains preceded by linguistic assimilation. Mingling of blood by marriage can only take place on a large scale when peoples of diverse origin accept one common *language and conform to the culture type of* which that language is the expression. The skin colour became irrelevant with racial mixture and there was a new theory of caste ([illegible]) in which the original racialistic notion of the Vedic Aryan was lost and it was only birth within a recog nised profession or industry or trade guild within a guild, so to say that formed the *essential argument for caste The economic aspect rose superior* to the racial the social to the biological caste Caste has been supported or tolerated by the Indian people as it generally helped the stability of their economic existence all racial implications being lost.

Racial and cultural fusion profound or on the surface was sublimated by a broad spirit of synthesis through philosophy and this has *given the basic character or tone to* Indian civilization

As regards language there has been through some 3 000 years a gradual approximation of the Aryan speech towards the Dravidian in its system or sounds in its trend in morphology in vocabulary and above all in its syntax or order of words.

As regards Aryan and Non-Aryan Culture fusion,

the economic background due to geographical environment, determines material culture The food of the Aryans consisted mostly of meat, barley, milk and its preparations and honey Wheat was found by them in Mesopotamia and rice in East, Iran or India as well as Centilo from the Mangoloid Eastern tracts The original Aryan habit of eating meat regularly and plentifully which we find discussed in the Mahabharat, gradually became restricted or abandoned but milk and vegetables, plenty in India helped by later ideas of Ahinsa (after 1 000 B C.) came to dominate life By Kautilya s time (4th Century B C.) rice prepared dal, ghee or oil and salt was the food of the middle class Arya Hair gave way under Buddhist and Jain influence In housing wood gave way to brick and stone or bamboo and wattle.

Food and drink, dress, houses and furniture all these of the local pre Aryan Indian types had to be adopted by the Aryans. There are too many big or little matters with regard to social usage and way of living and personal habits in which it would be found that it is the pre Aryan manner which has triumphed.

Of the two strands in Indian religion philosophy and ritual, निगम & आगम the latter tradition is non-Aryan in origin very probably Dravidian The Vedic ritual of the homa conceded some place to the non-Aryan flower offering Puja Some of the deepest things in Hindu religious culture like the practice of yoga go back to pre-Aryan period The belief in the transmigration of souls and in the moral law behind the conception of the Samsara originated on the soil of India in the post Vedic period through a realization of the deeper notions of life and a future world which were current among the thinking sections not only of the Aryans but also the Dravidians and the Austrics. A finished philosophy seems to have come into being and suffused the entire Indian synthesis with its spirit during the great days of 1200 to 500 B.C. in the later part of the Vedic age and the age of the Upanishads. And this was the period when the Indian man with the great synthesis of diverse races and cultures in his

being came to be established as one of the most remarkable phenomena in the evolution of Humanity

The uninterrupted continuity of Indian culture has been universally recognized By the third millennium B C she had already a highly developed city culture thoroughly individual, independent and technically the equal atleast of the civilization of Egypt and Babylon—now no longer extant except in relics. It was deeply rooted in the Indian soil and every year fresh archaeological evidence extends its frontiers to the Southeast of the Indus Valley The Rig Veda, even according to the most conservative theories, is older than Homer or the Old Testament and the concluding parts which are the sources of Vedanta—the Upanishads—antedate Pythagoras and Plato In the Upanishads are formulated the distinction between Absolute Spirit and personal God between the ultimate truth of the eternal and the relative truth of the mortal existence. They give us techniques for spiritual realization which are flexible and continuous and discourage claims for the monopoly of truth. On the principle of live and let live they give full freedom to seekers to get their goal in their own ways

The sixth century B C Mahavira s and Buddha s period was a period of great awakening Their doctrines sanctified Ahimsa, and Buddha restated the truth of the Upanishads with a new emphasis. Asoka three centuries later spread Buddhism entirely by peaceful and cultural means in South East Asia and West including Syria and Palestine—as far as China and Japan and Indonesia. Everywhere Brahmanical and Buddhist faiths prevailed in Farther India, Indo-China and Indonesia and came to terms as in India.

About 100 A.D., a remarkable growth took place in the maritime and commercial activities of Indians in Farther India and Indian influence spread remarkably The first Sanskrit inscription found in Cambodia is of the 3rd century A.D and in Indonesia of the 5th Century A.D and small Hindu States existed in Malaya The improvement of navigation in this very period and the spread of Buddhism (the Dravidians were good sailors) the adherents of which religion did not fear contamination by travelling over seas and intercourse with

foreigners, largely contributed to this expansion The colonization was entirely pacific and India proper did not exert political influence in her colonies Indian influence and culture reigned in this part of the world till 1200 A D when the indigenous element began to assert itself and the decay of Hindu intellectual supremacy increased Hindu influence was a veritable fertilizing power in the spheres of artistic and intellectual creation

In the 13th or the 14th century traders from Gujerat imported Islam into Java

About and after the 8th century the teachers of South India Sankar Ramanuja and Madhva reinforced the cultural union between the North and the South.

When Islam spread in India theistic developments became more prominent in the doctrines of Ramanand, Kabir Ramdas, Dadu, Tukaram, Tulsidas Nanak and Chaitanya. Attempts at the reconciliation of the two faiths were made not only by spiritual leaders but by the Emperor Akbar In the Sufism of Islam there is a close approximation to Vedanta philosophy Indian spirit of comprehension and forbearance influenced the Mughals and the cultural activities of India between the 14th and 19th centuries illustrate Hindu-Muslim collaboration In science and literature music and architecture, in painting and dancing, there was a notable synthesis of Hindu and Muslim ideas.

Christianity flourished in South India from the beginning of the Christian era and the early Christians looked upon themselves as an integral part of the general Hindu community They are the inheritors of Indian culture and attempts to reconcile the inherited spiritual tradition of India with the acquired Christian doctrine are being made by the more enterprising of the Indian Christian leaders

Toleration in the positive sense of an active appreciation of other faiths has been the characteristic of India's religious life. Toleration is the homage which the finite mind pays to the inexhaustibility of the Infinite" (*University Education Commission's Report*)

Self discovery and mastery of self are steps in spiritual insight which makes a man conscious, according to our best thought, of the universal self of which all individuals races and nations are specific manifestations. The greatness of a culture consists not in its permanence which is a relative term but in the qualities which it is able to contribute to human growth in the way in which it is able to mould the hidden drama of history which is a perpetual struggle between external environment and the inner values of man. Its vital character is tested by its capacity to evolve without surrendering its master plan to adopt new material which enters into it, which though not strictly *conformable* to its central pattern is yet not in conflict with it!

Sri Aurobindo wrote many years ago what is still true today (The Foundations of Indian Culture)

Any attempt to remain exactly what we were before the European invasion or to ignore in future the claims of a modern environment and necessity is foredoomed to an obvious failure. But the Asiatic or the Indian mind can only assert itself *successfully by meeting these problems and by* giving them a solution which will justify its own ideals and spirit. Culture must evolve or it must die the only healthy change is a slow one The most successful society is that whose culture calls forth the best from its citizens and *responds* to the best in them in turn

There is a task here for every capable Indian mind—to think this out in its own light and power This should be the main purpose of such associations and of our universities.

In discussing abstract subjects like the civilization and culture of any nation, it is desirable to be as precise as possible in the use of the terms. *Unfortunately some scientific* and philosophic authors use the two terms as interchangeable One author defines culture as the material creation of man visible to the man plus the invisible world of his creation of his mind capable of being grasped by his thinking capacity It follows, according to this author that culture is handed down by tradition and circumscribed by time and space It is an attribute of human society but is manifested and lives in individuals,

rises or declines, but is never wholly expressed by one individual. It has a being independent of the individual. But every individual from his birth is enveloped in traditional culture, entangled in a strong and unseen web of culture. Civilization and culture are essentially the accumulated inheritance of a people. But they are determined by and in turn determine environment. Environment gives a bias, a tone and an emphasis to them.

While civilization is the sum total of social heritage projected on the social plane, culture is the same heritage focussed on the individual plane. As an eminent Indian anthropologist puts it, civilization is what we have and culture is what we are. Culture is civilization absorbed and operative.

With the process of the development of culture generally and Indian culture in particular clear and its essential nature explained it is time to examine the aims and objects of our Sammelan with reference to culture—its past deliberations and the possible direction of the present deliberation and future action.

The first session of the Sammelan of 1948 at Khurja proclaimed

1. the importance of Indian Sanatan Arya dharma and
2. the unity of Indian culture.

The 2nd Session at Banaras proceeded to pass resolutions urging

1. the prohibition of cow slaughter
2. the naming of India as Bharat
3. opposition to the Hindu Code Bill
4. the appointment of Sanskrit knowing persons as ambassadors
5. the inclusion of exponents of Indian culture among deputations to foreign countries
6. the establishment of India's polity on the basis of India's culture
7. the selection of Hindi as the official language of the Union and of Devanagari as the alphabet in the Constitution and

8 the introduction of Sanskrit as a compulsory subject for study in schools and colleges and universities.

There had been a special session before this at Mirzapur where attention was also drawn to the need of improving the cultural point of view in cinema films.

In the 3rd Session at Hardwar in 1950 the alleged indifference of the Government of India to Indian culture was deplored

In the 4th Session at Delhi in 1952, the new matters included in resolution were in regard to

1 the need of maintaining the tradition of Indian culture and
2 the re-organisation of education in India on specific Indian lines according to the culture and genius of the people

In the 5th Session in 1953 at Rishikesh the resolution on fresh aspects included those urging

1 attention by Sadhus to improvement of society
2 removal of communal prejudice and ill-feeling and disharmony and their replacement by mutual respect and sense of unity
3 the reconstruction of villages as places of light and beauty
4 the service of the afflicted
5 the unwavering pursuit of truth by every class and section of society
6. raising the moral tone of public life and
7 the prohibition of intoxicants and drugs including tobacco

The 6th Session at Prayag in 1954 drew attention to

1 the alleged objectionable methods of proselytization used by foreign missionaries
2. the evil of prostitution
3 the necessity of erasing obscene figures from Hindu temples and
4 the prevalence of corruption and dishonesty especially in commerce and industry

The 7th and immediately preceding session in 1955 at Bhiwani (Hissar) pleaded for

1 safeguarding India s culture from invasion of foreign ideas, as well as from injurious customs
2. the abandonment by Naga Sadhus of their practices of public exhibition of nakedness and
3 whole-hearted co-operation by the public in Buddha Jayanti celebrations.

If as a new-comer to the scene I may presume to judge I would say that the Sammelan has given evidence of having grasped the essentials of culture its propagation and practice and that most of the action suggested was such as actively and significantly to subserve the ends of a cultured society The only criticism (of a general nature—for in individual items, I may not be sharing the views previously expressed) I would venture on is that the coverage is excessively wide from the point of view of effective propaganda and action

Of the 27 topics which were the subject matter of decla rations or resolutions, many are such as to be beyond controversy e g. antiquity unity and quality of Indian culture Some are no longer topical as having been decided by the Constitution makers e.g. the naming of the country as Bharat the recognition of Hindi as the official language and its implications Some have been decided by the Parliament, as for instance the Hindu Code Bill (and I must refer here to this as an example of the view of the Sammelan with which I am strongly in disagreement. I am unreservedly for equal rights with men for women and consider this as the trait of the most elevated state of culture for any human society) In my opinion matters like the qualifications of ambassadors had best be left to the discretion of the Government as the interests of the nation cannot be judged and represented solely with reference to learnedness in Sanskrit As regards the teaching of Sanskrit the Government has recently appointed the Sanskrit Commission, and it would seem desirable for the Sammelan to appoint a Committee to formulate its views before the Commission Although interested in and devoted to Sanskrit, I must record my view here that I foresee great

difficulties in introducing Sanskrit language and literature as a compulsory subject in school, college and university curricula although a knowledge of their bearing on our culture and on our present day languages should in my opinion be so

As regards cinemas and suitability of films, I believe with the recent establishment of the Film Board and Institute this important matter will receive adequate attention.

Prohibition is another problem to which public attention has been drawn although I believe that reform in this matter can only take place slowly and painfully

Of the remaining issues there are some which are fundamental others not so In the latter category are the practices of the Nagas, the obscene carvings on temple walls and the attitude generally of sadhus towards matters cultural. Sadhus have now been brought together in a samaj and it will be sufficient if a Committee of the Sammelan is appointed to act as a liaison body with the Sadhu Samaj

Village reconstruction on the lines recommended by the Sammelan should likewise be entrusted to a Committee who could keep in constant touch with the Community Development Organisations of the State

The Central Social Welfare Board appointed the Social and Moral Hygiene Committee and on their advice Government has a programme and provision included in the Five Year Plan to deal with some aspects of prostitution. A Committee of the Sammelan might study this matter further and act in liaison with the Central Social Welfare Board

Alleged unfair proselytizing by foreign missionaries is a matter which has assumed public importance and drawn public attention on account of a recent report of an enquiry committee in this State I do not consider it necessary for the commission to pursue the matter I regard all forms of unfair proselytization as essential violence.

As regards reorganisation of the educational system also, the subject is so vast that unless the Sammelan sets up a machinery to work out concrete proposals that will fit into the pattern of improvements recommended by the various com-

missions and reviewing Committees and their assessment, our resolutions will be fruitless.

A survey of the contemporary scene will not fail to confirm the Sammelan s view that in practice our culture is not influencing the lives of the people in depth or extent, with the result that the nation s material, moral and spiritual progress and with it the well being happiness and serenity of the people are being retarded. This is happening not because there is no realisation of cultural values but because these values only receive lip service on the part of the leaders of the populace in all walks of life I refer not only to political leadership at various levels, but also leadership in educational institutions, particularly universities, commerce and industry the professions, literature and art philosophy and religion. One may pithily describe the crisis of our time, as a crisis of leadership and to me it undoubtedly is a crisis, endangering our cultural values. It is to this crisis that bodies like the Sammelan will have to pay special constant and concentrated attention.

What are our cultural values and how are they reflected in the higher manifestations of the soul of our people ?

The attributes of culture are

1 The enthronement of reason ;
2. Devotion to the truth, the good and the beautiful (सत्यं शिवं सुन्दरम्)
3 Tolerance
4 Curiosity and enterprise
5 Non violence or the love of peace

The list can be expanded but all that is good indifferent or bad in contemporary life can be attributed to the strength or weakness of our values and attitudes under the above five heads. For instance hypocrisy and lack of intellectual honesty want of sincerity are offences against truth Corruption, cheating, selfishness, greed love of power are violations of the good Shabbiness slovenliness, untidiness tawdriness are antithetic to the beautiful. Communal disharmony is probably the offspring of lack of tolerance when it is not just a cloak for selfish ends. Ignorance and apathy to culture are the result of lack of

intellectual curiosity and enterprise Apathy towards the afflicted multitudes of *prejudices superstitions deleterious* customs are all sins against reason Exploitation of the poor or the weak is essentially violence

This does not pretend to be a scientific diagnosis nor is it intended to be exhaustive My object is only to draw attention to the major prevailing weaknesses in our society and trace them to culture being inoperative

Without being too philosophical (and philosophy is concerned more with the conflict of values in order to discover which values reflect the greatest wisdom and are therefore more desirable) I would say that selfishness and hypocrisy are found sufficiently wide spread in incidence in our society to make it a matter of deep concern to those who have the good of the nation at heart.

A peculiar form of selfishness or ego-centrism is the proclivity of persons in high places even in social service to build empires at the cost of the lawful influence of others This lawlessness is exhibited not only by the able but also by the confused and cannot be condemned too strongly

But before these last band together as they have in this Sammelan, they must purify themselves first. If they themselves are found to be wanting then they can have less influence on others

Hypocrisy is a double untruth as being an untruth it masquerades as the truth Professions and practices differ with us in too many quarters for the truth to triumph and our national motto is often a mockery The only remedy is for those dedicated to truth to unmask the hypocrite wherever possible

Selfishness is another of our wide-spread evils destroying the real value of social service reconstruction work and even political leadership The people served are quick to detect selfish ends or quest of power on the part of leaders or workers and cynicism and lack of faith and genuine co-operation result.

Intolerance and intellectual arrogance are often found enthroned in high places, in a land where tolerance and

humility are traditionally applauded. Although in political circulars it is good form to inveigh against communalism all elections, trafficking for leadership and the business of Government are dominated by communal considerations. Non-violence and kindness to all beings are proclaimed as guiding principles, but fear of political penalty paralyses right thought and action and politicians are encouraged to stifle their conscience, under pain of losing their ticket for election.

In commerce and industry also, exploitation of the weak and the ignorant and the disadvantaged goes on without mercy or any thought of fellow-feeling since business is business.

As long as politics is politics and business is business, our culture will only be an empty boast, acting like an opiate to our conscience but impotent to arrest the degradation of society and its ultimate destruction.

In the final analysis a remedy for all this lies in the hands of the people who must disown or refuse to patronise those who are guilty of lapses from the moral codes inherent in our culture. But they have to be helped to recognise lapses, and this is the duty of leaders of thought in and out of universities. They must first purge themselves, carry on a crusade against violation of cultural codes of conduct and not make any compromise with evil. It is only then that our culture will live and respond to the needs of the times. The requires courage, but we must remember Bhartrihari,

एकेनापि हि शूरेण पादाक्रान्तं महीतलम् ।
क्रियते भास्करेणेव स्फारस्फुरिततेजसा ॥

GURUKUL KANGRI*

I am glad to be present amongst you here in the sacred and cheerful environment of the Gurukul near the Himalayas on the banks of the Ganga For this I must, above all, thank Pandit Indra Vidyavachaspati, because it is he who has given me this opportunity by inviting me to deliver the convocation address. He has also greatly honoured me by this invitation In 1921 the Gurukul was given the shape of a university and since then many distinguished leaders have delivered convocation addresses here I am grateful to Indraji for the honour he has done me by placing me in the ranks of Mahmana Pandit Malaviya, Dr Bhagwan Das, Swami Shraddhanand Dr Rajendra Prasad Acharya Narendra Deva Gurudeva Rabindranath Tagore Dr Radhakrishnan Rajarshi Tandon and others

The Indian National Congress was founded towards the end of the nineteenth century when a new wave of political awakening swept over the country The strength of the new political consciousness was reflected in the agitation stirred up at the time of the partition of Bengal As a consequence the leaders of new India began thinking about national education and throughout the country several institutions came into existence which had no connection with the State universities and which received no assistance from the Government. They were determined on evolving a free educational system for free India and were firmly advancing in that direction They had to face innumerable obstacles and many of these centres of learning met with an untimely end. But the organizers of some of them displayed unshakable determination and they continued to flourish in the face of all difficulties. The Engineering College of Jadavpur the Vishwabharati of Shanti-

*Convocation Address delivered in April, 1957 at Haridwar

niketan, the Jamia Millia of Delhi and the Gurukul Kangri of Haridwar belong to this national tradition.

At the outset, I shall describe the educational system of ancient India which with necessary modifications you wish to revive. The system that had come down from the Vedic ago was at a later stage codified. The ceremony of Educational Initiation was performed as soon as the child attained the age of five and thereafter instruction in script and numbers began. At the age of eight the 'upnayana ceremony of the child took place. This ceremony was meant not only for the Brahmins, the Kshatriyas and the Vaishyas but also for the Shudras Dr Radhakumud Mukherjee has given an elaborate description of these ceremonies in his book entitled Ancient Indian Education" The upnayana ceremony was regarded as a second birth and the Guru was given the father's status There were definite regulations regarding dress and hair-styles for the ceremony After this ceremony the Guru admitted the Brahmachari (celibate) to his school. During the course of his education the Brahmachari had to seek alms from door to door and had to fetch firewood water and flowers for the Guru. He also had the right to reproach the Guru if the latter proved wicked. The Brahmachari woke up before sunrise and soon finished his bath etc. Through prayers and 'pranāyāma he daily practised mental concentration Things of luxury like shoes carriages, gambling dances, perfumes and songs were forbidden to him. Indulgence in circumlocutions unnecessary discussions, falsehoods, sleeping in daytime sexual indulgence, anger jealousy greed etc. were also strictly prohibited Qualities like dutifulness, meekness, self confidence and humility were cultivated On the completion of the Brahmacharya āshram the student was shut up in a room so that his glory might not outshine (shadow) the Sun. On that day all the marks of his student life were removed and he had to bathe in perfumed water Then at last that graduate returned home to enter into family life This procedure was called the 'Samāvaratan Sanskār We have assembled here today for the same purpose.

Maharshi Dayanand Saraswati had dreamt the golden

dream of the revival of the Gurukul traditions and Swami Shraddhānand strove to give it a shape The history of the world shows that the dreams of pure souls prove true and their pledges never fail Swami Shraddhānand wanted to revive the tradition under which after the 'upanayana sanskār the child entered Brahmacharya Āshram and stayed at his Guru s house for tweleve years to gain knowledge of the arts (humanities) and the sciences Through this revival he desired to effect a synthesis between ancient culture and modern science By adopting Hindi as the medium of instruction he wanted to arouse the feelings of self-confidence and patriotism In the *year 1950 on the occasion of the Golden Jubilee of the* Gurukul the Governor of Bombay, Shriyut Sri Sri Prakasha, revealed that when Swamiji started his work there was little hope of success. It is an unmistakable proof of his resolute courage and unshaken enthusiasm that he not merely resolved to make our education truly national and completely indepen dent but also actually founded this institution—in a sylvan setting amidst the denizens of the wild, by dint of his personal labour His ambition alone was the source of his strength It is a matter of great satisfaction that the sapling planted by him became such a gigantic and mighty tree—and hundreds of students who received the right type of education under its shades with their physical mental and spiritual life properly developed rendered valuable service to the country and the society

Since the degrees and certificates of the Gurukul were not recognised by the State its progress and popularity were retarded. However, after India became independent these hindrances were removed and the Gurukul of Haridwar has now become *a recognised centre of education* The Government of India in consultation with the Union Public Service Commission declared in a press-note on the 18th September, 1951 that the degree of Vidyalankar conferred by the Gurukul University would be considered equivalent to the B A degree and the certificate of Vidyadhikari would be regarded as equivalent to matriculation till 1958

The Commission which was appointed by the Government

of India in 1948-49 under the Chairmanship of Dr Radhakrishnan to advise them on problems of university education, recommended in its report that the Vishwa Bharati and the Jamia Millia be declared universities but said nothing about the Gurukul Kangri According to the recommendations of the Radhakrishnan Commission the Government of India introduced the University Grants Commission Bill in the Parliament which was duly adopted as an Act of the Legislature. Under this Act a commission has been set up of which I am, at present, the Chairman Under Clause 3 of this Act the Commission has been authorised to recommend to the Central Government to grant recognition to any institution as a university The question of giving the status of a university to the Gurukul Kangri and some other institutions and of extending recognition to their degrees has been entrusted to a committee of this Commission but it has not yet taken its final decision The committee will have to consider this matter in its various aspects Firstly it will have to lay down certain fundamental principles on the basis of which an institution may be placed in the category of universities Then it will have to gather full data about such an institution After that only can be determined whether or not a particular institution should be given the status of a university Under these circumstances first of all I must make it clear that whatever I shall say here should not be considered as the official view of the University Grants Commission. For my part, I shall today try to analyse ideals rather than facts so that the deliberations of the fact finding committee may not be affected either way

It is regarded as the main characteristic of the Gurukul Kangri that here emphasis is laid on the character building of young men. Various methods are used to inculcate in them qualities such as self-discipline self confidence, fearlessness, simplicity magnanimity (generosity), truthfulness and regularity *(punctuality)* *Children above the age of 8* years are not admitted to the Gurukul. After admission, a student is not ordinarily permitted to leave the environment of the Gurukul so long as he is a student viz—from the age of eight till the age of eighteen In the beautiful and peaceful atmosphere of the

Gurukul the natural instincts of these children are refined and during this period attempt is made to isolate them from external evils The Gurukul assumes a serious responsibility because it imposes strict control over every moment of a student s life from the age of eight to that of eighteen I hope in discharging this responsibility due attention will be paid to the latest principles of psychology We should certainly be proud of our ancient traditions but we should also be prepared to make necessary modifications in our traditions in the light of the progress of human knowledge In ancient times when the Gurukul system was prevalent such a wide gulf did not exist between the urban life and the sylvan life as it does to-day There were good houses and roads in cities good foodstuff and cloth were easily available All these amenities were not available in the Gurukuls that were built in the forests far away from the towns This was the only disparity No difficulty arose in rehabilitating the young man who returned home after imbibing knowledge, strength and humility at the Gurukul for twelve years because there was no great difference between the life at the Gurukul and the contemporary family life But if to-day we educate a child in a forest from the age of eight to that of eighteen and then leave him in a magic city provided with electricity radios, telephones, railways aeroplanes cinema and television, he shall suffer the same fate as king Duryodhana in Mahabharta in the palace built by the fabulous architect Maya Even little girls will be amused at his pathetic plight This will happen if we blindly follow our ancient traditions and refuse to make any alterations in the ways of life at the Gurukul. I am glad you are not blindly imitating the past. You have tried to make a replica of the external world in this Gurukul as was attempted by Rajarshi Vishwamitra also The child brought up in this Gurukul will not be a failure in the external world

In this context one more fact should be borne in mind In spite of our best efforts we cannot today save a child completely from the temptations of city life. Of course you may not permit him to indulge in these temptations, but you cannot prevent him from observing them In this situation, we must

bear in mind a principle of modern psychology Character cannot be developed in an atmosphere of fear By repressing the natural impulses of a child we distort his life and make it morbid If the child s natural inclination is ruthlessly repressed he begins to look upon the whole world as his enemy and his entire life is converted into a tragedy We can only mould character but cannot cast it. We have not to root out natural instincts we have only to culture them If we lose sight of this fact, there is always the fear of our efforts yielding fantastic results.

The literature about the Gurukul Kangri sent to me by Pandit Indra Vidyavachaspati for my information reveals that in July 1953 the Vedic college was merged in the general college and that before this merger there were 12 students and 4 teachers in the Vedic college Similarly in the general college there were 9 students and 8 teachers. On adding these figures, we find that in the sphere of higher instruction there were twelve teachers to teach twenty one pupils In the higher centres of education like Calcutta, only one teacher is available for fifty students Modern educationists are of the opinion that for ideal education the teacher student ratio ought to be one to ten.

In the Ayurveda College of the Gurukul there were 17 students and 10 teachers during the period under reference. The High School Section of the Gurukul is also making satisfactory progress. There the number of students in 1953 was 303 and that of teachers 23 The branches of the Gurukul are set up at a number of other places such as Dehra Dun, Kurukshetra Matindu, Ludhiana, Jhajjhar Supa, Indraprastha, Hyderabad Vaidyanath Dham and Ghasipura. Extensions are being made every day to the Central Gurukul. It has its own library reading room historical and scientific museums botanical garden, hospital cattle-shed workshop printing press and monthly magazine. It has its own arrangements for electricity and water supply This only indicates that the Gurukul desires to march abreast with the times.

In 1926 Principal C. V Vaidy of the Tilak Vidyapeeth,

Poona, in his convocation address to the graduates of the Gurukul, laid emphasis on learning Western sciences and technology and made it clear that the Vedas are not hostile to the progress of science. On that occasion he related a pauranic legend which describes how the Gods gained knowledge of the elixir of life from the demons.

Now a-days we are told that there is a gulf between the humanities and the sciences. The humanities cover the cultural and the social subjects, while the study of the material universe is considered to be science. Some people compare the humanities with the sciences and applaud one against the other In my opinion human society needs both, science as well as the humanities. We need the humanities to determine the values of life by expounding the aims of human life as also to evaluate the various objects of the world in an order of priority and sciences are needed to procure these desired objects easily from the material world Hence there is no hostility between sciences and the humanities—on the contrary there is a close harmony between the two Of course it is true that as compared with the constant progress in the field of sciences there seem to be no miraculous discoveries in social and cultural spheres. It is also natural that in a back ward country like India, more emphasis should be placed on the progress of sciences for promoting material prosperity But unless it is firmly founded on the humanities the palatial structure of science is bound to prove dangerous Similarly there are controversies about scientific education as well. Some people give priority to research in the basic principles, while others attach greater importance to technology We shall have to admit that India today stands on the threshold of an industrial revolution. Mighty industries driven by electrical machinery are being created out of a pre-eminently peaceful and agricultural economy Countless mechanics, technicians and engineers will be needed for this revolution We shall have to make provision for this in our educational budget, if we want to preserve our independence in this compe titive world and advance towards our declared obj ctive of a socialistic order by raising the standard of living of our people

However this industrialisation does not mean that man's entire life shall be mechanized Dr Radha Kumud Mukherjee has said in his book already referred to that India has always believed in simple house industries and home education. India has never had factories and workshops for standarised production of goods. Works of art are the product of human skill and not of machines. The development of human soul is also an artistic activity The spiritual development of students also depends upon the efficiency of the teacher The mutual exchange between the teacher and the taught is the real education. The pupil is taught by an individual teacher and not by an invisible institution. However in modern institutions the teacher teaches classes—not pupils. This system of factory production is as efficacious as giving the same treatment to all the patients en block. How can subtle and profound things like the human soul, the mind and the intellect be cast in the same mould? The socialistic State of today should be on its guard against mechanising education

The system of education in new India should not be mechanical, yet it must be cheap because the demand for educational facilites is increasing day by day In the year following Independence there were only 230 000 students in Indian universities. Today the number has increased to 750 000 In a college in Calcutta as many as 13 000 students are pursuing their studies at one place. As compared with these figures, the achievement of the Gurukul seems to be rather indifferent so far The Gurukul has 2500 acres of land, buildings worth Rs. 110 million a cash balance of Rs. 850,000 and its annual budget exceeds Rs. 500,000 If with all this huge investment and the labour of 40 years only 600 students have graduated from the Gurukl so far we should find out the reasons. They will have to be removed so that, consistent with your aspirations the Gurukul Kangri may become an ideal university of modern India.

In conclusion I wish to say a few words to the new graduates who are leaving the idealistic atmosphere of the Gurukul to enter the practical world of business. The world is very dynamic and there is a great demand for scientists and

technicians yet greater is the demand for people whose character sense of justice and creative ability can be relied upon. We are lagging behind on account of centuries of slavery and in order to line up with the advanced countries we shall have to work very hard This task is as great as was the struggle for freedom We have become lethargic on account of centuries of slavery We can easily tolerate injustice, rudeness and falsehood We shall have to give up this moral apathy and this is to be done by young men like you. The world that you will enter with such aspirations will be lacking in comforts and amenities and you will have to struggle hard to attain them The moral plane of this struggle will be very low Everywhere, you will find the greed for power crooked ness, dishonesty indifference to justice and such other evils triumphant In such an adverse environment, the strength of your character will be put to test. Cultured young men like you with strong character will have to change this atmosphere It is natural that each one of you may not be able to display supreme courage. However, the progress of a society can be measured only by the character and efficiency of its ordinary (average) citizens. It is true that the development of culture and civilization is the result of the efforts of a few extraordi nary thinkers. But the extraordinary will be extraordinary after all. The common people can always do one thing. They can remain firm in their character and can promote the progress of entire society Whatever be your status or post, I shall request you to work whole heartedly and to preserve your character Character has no connection with high or low status. On the contrary I have noticed that even a rich man does not attach as much importance to character as a poor man does The experience of the human race to this day shows that the bliss of character eclipses all the pleasures of wordly life. And what else do we need besides maximum bliss in life ?